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Rock Products and BUILDING MATERIALS

INCORPORATING DEALERS BUILDING MATERIAL RECORD

Volume XVIII | CHICAGO, ILL., JUNE 7, 1916 | Number 3

Rock Products and BUILDING MATERIALS

INCORPORATING DEALERS BUILDING MATERIAL RECORD

Volume XVIII **CHICAGO, JUNE 7, 1916.** **Number 3**

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Charge cost and profit on deliveries in a systematic way or the unseen costs will eat up any dealer's capital.

To build a chimney without a flue liner is the next door neighbor of committing arson. The additional cost is not noticeable, and by long odds is worth more than a fire insurance policy. Every dealer ought to carry a stock of 8"x8", 8"x12" and 12"x12" sizes for ordinary use.

The dealers who make the greatest profit out of the builders' supply business are those who keep in stock a full assortment of the specialties that are now called for with every job. Brick ties to lay in the mortar beds, corner bead, wire cloth, steel lath, plaster board, mortar colors and coatings are indispensable in these days of better buildings.

Labor shortage in the quarries is felt with increasing emphasis since it is found impossible to make a start with some of the institutions that felt there would always be plenty of workers. Don't think there is going to be any early improvement, for no such thing is in the cards. Provide the labor-saving machine tools to get along with the minimum number of men.

Dealers in the smaller towns begin to realize the value of joining in the association effort to educate one another on costs and operating losses. If all of the leaks could be stopped there would be a lot of profit that now goes off in waste. Few dealers realize the actual cost of warehousing and rehandling their tonnage, and very few know that it is these unseen costs that keep them poor. No association meeting is complete without a heart-to-heart conference on the every day costs that are never paid for by the customer.

Substantial buildings are naturally tending to concrete construction more and more, because of all the recognized substantial types it is the only thing that has not advanced in price beyond all reasonable limits. Permanent structures can only be considered in terms of concrete, because it is fire, rust and rot-proof, and no other material has these qualities.

The big politicians are making history right under our noses as this copy goes to press. For the moment Chicago is the center of the world, although the actors do not seem to realize it yet. Big responsibility is seldom recognized until long afterwards, and very few recognize the real commercial importance of our country which is now in the balance along with the national policies.

Auto truck deliveries are making good in the delivery of crushed rock and other road materials. First cost of such equipment as the motor truck, the trailer wagons, and the car unloader are very soon forgotten in the presence of the profit and independence that the equipment earns. Now, for goodness sake, take a good lump of the profit. Don't figure it all away, as has been done so often in the past.

Unsettled and wet weather cost the quarry operators and road contractors a lot of money last year. The opening of the present season looks alarmingly similar so far, and there seems to be some pith to the belief that the heavy and long sustained cannonading of the war in Europe has a bearing upon the irregular and over-plentiful rainfall. It will be well to figure adverse weather in the factors of cost upon the curtailed production.

Cement stucco exteriors are a most attractive and profitable feature of the dealer's possibilities to create in the way of new business. It will pay to handle the steel specialties as well as the cement and the aggregates. It is up to the dealers to get energetic and by a little well-directed effort make two blades of grass grow where there was only one before. It will be found that nearly everybody can stand a little more business of this kind.

It is all a mistake to consider that very high wages such as now prevail are any advantage or benefit to the laboring man. If there is any one thing that he don't know how to do, and never will know how to do, that thing is how to handle money intelligently, and when it is carelessly handled there is calamity and catastrophe sure to follow. The handling of money properly constitutes a very exact and difficult science, known as finance. Money is a technical tool of the trained financier in the control of business; and as such is entirely out of place in the hands of suave amateurs, as the average workingmen are and always must be. Purchase power means nothing to the amateur who sees only plain amounts, while the financier thinks in no other terms. If forced to advance wages against his judgment, the financier only has to change the purchase power to reduce the larger amount to exactly the same value as the original rate. Why cannot the workingman soon learn that it is not more money he wants for his labor but more purchase power—more value. This he can only secure with the consent and by the co-operation of the financier who uses money, his own powerful tool, to regulate the balance of values involved in business. All of the strikes, all of the contention, all of the fool arguments are futile, and can never accomplish any good, and they never have improved or benefited any workman.

WITH YOU and ME

The Mackinaw Sand & Gravel Co. has moved its offices from Peoria, Ill., to Lincoln, Ill.

The Walter A. Zelnicker Supply Co., manufacturers and dealers in railway supplies, of St. Louis, Mo., is represented in Chicago by Ed. Elson, with offices at 423 First National Bank Bldg.

F. A. Costello, president of the California Pottery Co., and the California Paving Brick Co., of San Francisco and Oakland, visited Los Angeles, where he found business in building lines on the mend.

Big Ed Fillion, of the Chicago Portland Cement Co., carried the Indiana banner with Fairbanks picture on it above everything in sight from Van Buren street, in spite of the rain and other physical discouragements during the Republican convention in Chicago.

Edw. F. Tierney, who represents the American Cement Plaster Co., Fort Dodge, Ia., in the state of Wisconsin, was married on May 17 to Miss Francis Wood, at Fort Dodge. The young couple will make their home at Wausau, Wis.

C. E. Negley, of the Indianapolis Cable Excavator Co., was the leader in front of the band that led the Fairbanks delegation into the Republican convention just about the time we were going to press. Then there was something doing every minute.

The J. E. Baker Co., which operates large stone quarries at Billmyer and Chickies, Lancaster county, and also in York county, has voluntarily increased the wages of its employees from $1.65 to $1.80 per day. It is the second increase within a short time.

Henry M. Camp, of the Lime Service Bureau, of Washington, was one of the heavy workers of the nominating convention in connection with his duties as secretary of the National Republican League. He was the first of the delegates to recognize the solemnity of the responsibility of the occasion, and sure did a man's part in the trenches.

Charles O'Donnell, Bellefontaine, Ohio, of the Buckeye Portland Cement Co., and the American Refractories Co., was a Chicago visitor last week. He declared that he had a great deal of business on hand, but we suspect that some of it was in connection with the big political convention, because he could quote whole paragraphs from Senator Warren G. Harding's great speech at the opening.

Sixty members of the Philadelphia Dealers' Association, an organization composed of members of the lime, cement and similar building material industries, were the guests of Colonel Henry L. Trexler, president of the Lehigh Portland Cement Co., on Tuesday, May 23. The trip to Allentown was made in a two-car special limited train of the Lehigh Valley Transit Co., which left at eleven o'clock Tuesday morning. The trip included the inspection of the Ormrod, West Coplay and Fogelsville plants in the order named, following which the famous game park was visited. The late afternoon was spent in visiting the fish hatchery located along the Little Lehigh, after which the visiting dealers returned to Allentown and thence to Philadelphia by way of the electric service.

R. B. Dickinson, formerly works manager of the Marquette Cement Manufacturing Co., and more recently northwestern representative of the same company, has been selected sales manager of the New Zealand Cement Co., and will take up his new duties within a month.

William S. Speed, president of the J. B. Speed Co., and the Louisville Cement Co., recently purchased a twenty-four-acre estate on Cherokee Drive and is planning to erect a handsome residence on the property in the near future. The property has been improved considerably during the past few years and is said to be one of the finest estates in the vicinity.

Charles Warner, Wilmington, Del., came to the Republican convention as an alternate and later there were rumors to the effect that they had made a National committeeman out of him. For years we have known him to be somewhere near the greatest committee worker in organization efforts that this nation of business men affords.

A new builders' supply firm at Lebanon, Pa., is Petty Brothers & Co., which has been formed lately by John and J. K. Petty and Thomas L. Here. It will handle sand, gravel, lime, stone, cement, etc., and will also have a coal yard.

Charles A. Wolcott, an enterprising builders' supply and feed merchant at Lockwood, Ohio, is going to put in a modern coal unloading plant at once. He has one of the best stands on the P. Y. & A. R. R. and enjoys the full confidence of a very large circle of farmers.

The annual shad dinner and May frolic of the Philadelphia Master Builders' Exchange was held at Point Breeze Park, Tuesday, May 12, some 300 builders and representatives of most of the allied trades attending. It was by far the most successful outing in point of attendance ever held by the Exchange and more amusement features were crowded into the afternoon and evening than the builders believed possible. Races and games kept the park in an uproar during the early hours of the outing and chief among the indoor sports was an attractive shad dinner.

The last luncheon of the spring session of the Pittsburgh Builders' Exchange will be held on Thursday, June 8. It will be Boosters' Day and there will be lots of fun, good music and also several unique and unusual features to assist in winding up the meetings in a blaze of glory. The Exchange has issued its last call for members to join the Atlanta Club, which will travel from Pittsburgh in special cars, stopping at Louisville, Nashville and Chattanooga on its way to the next convention of the Builders' Exchanges of the nation. Many novel features are contemplated on the trip.

M. J. Bannon, president of the P. Bannon Pipe Co., Louisville, Ky., has made arrangements to attend the annual meeting of the International Clay Publicity Bureau, which will meet in Chicago on June 20. Mr. Bannon stated that the company is pushing its new lines of face brick this season and is getting a good run on salt glaze, matt face, common shale, hollow tile, drain tile and other clay products. A. P. McDonald, sales manager for the company, during the latter part of May made a trip with the boosters of the Louisville Board of Trade through Tennessee, covering 1,200 miles in four days.

The nineteenth annual meeting of the American Society for Testing Materials will be held at Atlantic City, N. J., June 27 to 30, 1916. Headquarters at the Traymore Hotel. A revision of the requirements for Portland cement in the present standard specifications is to be passed upon at this meeting. Standard tests for wood materials and many other technical matters relating to the control and improvement of the materials of constructing will be considered.

William Meadows, aged eighty-three years, probably one of the oldest men in active business in southern Wisconsin, has tendered his resignation as secretary, treasurer and general manager of the Burlington Brick & Tile Co., Burlington, Wis., a position he has held for nearly thirty years. Mr. Meadows has been well known to business interests of southern Wisconsin since 1865. In company with his son George, of Ipswich, S. D., he will leave shortly for California and spend some months in traveling. Although eighty-three years of age, Mr. Meadows drives his own automobile and is as spry as many men of half his age.

The American Manganese Steel Co. has announced that in order to give its customers the best service possible it has found it necessary to provide increased manufacturing facilities. The company has, therefore, purchased the plant of the Brylgon Steel Casting Co., at New Castle, Del. This is a large, up-to-date steel foundry having a monthly capacity of approximately 400 tons of steel castings. The task of converting the newly acquired plant into a manganese steel foundry of the latest and most efficient type is progressing rapidly and the company hopes to be producing in this plant by June 15. The American Manganese Steel Co. now has two plants at New Castle, Del., and one plant at Chicago Heights, Ill.

The Eldorado Lime Co. has filed articles of partnership at Placerville, Cal., the partners being W. S. Tuttle of Haggin Park, Sacramento; F. R. M. Bloomer of Sacramento, and George Bonnefoy of Shingle Springs. The firm will own and operate a quarry near Placerville.

Weston B. Lazear has recently assumed charge of the New York office of the Stephens-Adamson Manufacturing Co. and territory adjacent to New York City. Mr. Lazear is already acquainted in this territory and has demonstrated to a growing clientele his ability to be of practical assistance in the selection and design of modern conveying systems to meet individual conditions. Mr. Lazear is a graduate engineer (University of Illinois, '07) and has devoted the past seven years to the design of "S-A" conveying, elevating, screening and transmission machinery. Various stages of his experience cover a period as draftsman, then chief draftsman, and later sales engineer. In the latter capacity he has been associated with the New York office for the past year. The chief aim in the selection of branch managers is to secure men able to serve as consulting engineers in the design of modern labor-saving machinery. Mr. Lazear's experience in all branches of this line as well as his ability as an engineer fit him particularly for his new position. G. H. Stephens, until recently vice president and eastern manager of Stephens-Adamson Manufacturing Co., has retired from active business on account of ill health. Mr. Stephens has been prominent in the conveying industry for twenty-five years and has enjoyed a wide acquaintance among machinery users of the east.

The RETAILER

Handling of Portland Cement By Lumber Dealers*

BY F. L. WILLIAMSON,
Vice President, Dewey Portland Cement Co.

Before going into the subject assigned me, "Why Retail Lumber Dealers Should Handle Cement," I feel that it might be well to bring to your attention the fact that the dealers handling lumber are no longer properly identified by being designated as "lumber dealers." There was a time when this appellation would have been a proper one, but with the progress in construction lines that has been made during the last few decades, the lumber dealers have kept pace and have developed into material men, or building supply dealers. As such, they are supplying the consuming public with the many varieties of building material specialties demand in modern construction.

Portland cement was looked upon for many years, and, in fact, was a commodity that was supplied in small quantities for very special jobs and was carried by the dealers largely as a matter of accomodation to their trade. To bring the situation home to you, I might compare it to the handling of Keene cement at the present time. Following some radical improvements in the equipment and methods of the manufacture of Portland cement, the cost of this commodity was so much reduced that it became possible to use it for many forms of construction, where before the cost was prohibitive and the general public was obliged to use cheaper and more abundant materials. Inasmuch as the lumber dealers had, as an accomodation, been supplying the consuming public with the small quantities of cement which they had been needing, it was quite natural that they should take up the distribution of the product when it came into more common use. As a result, with the natural development of the use of Portland cement, the lumber dealers have now become recognized as the cement dealers, and, in many instances, are handling more carloads of cement than they are of lumber.

Unfortunately, some of the lumber dealers got the impression that cement was becoming a substitute for lumber. It is, of course, only natural that the manufacturers of lumber should endeavor to combat the growing use of cement, and to try to maintain the use of lumber in many places where, in the past, it has been used on account of its availability or its cheapness. That you may clearly understand my position, I wish to quote from a letter we received some time ago dealing with the subject of substitutes. I quote as follows:

> As far as Portland cement is concerned, it is not a substitute for any created thing. The progress of the industry clearly proves that it is, for its particular uses, the ideal construction material, and that lumber itself for many years has been temporarily substituting in the place of permanent concrete construction. Substitution indicates temporariness, a makeshift, a use of the inferior in place of the better. How can cement be called a substitute, or concrete a substitute?
>
> Cement ought not to be looked upon as a substitute for any other building material. It ought to be sold, and only sold where it is the best material for the purpose. In the many phases of construction work where it is undeniably the best suited material, it certainly substitutes for nothing I know of. When I hear it denounced as a substitute I ask by what reason it is so called and for what material it is being substituted.

One of the weightiest reasons why the lumber dealer should handle Portland cement follows from the above considerations. The lumber dealer, as such, no longer exists. He has been supplanted by the modern material dealer, who feels that he owes it to his community to supply such building material as the trade and the conditions demand. Certainly trade and conditions demand cement. The manufacture of cement is one of the ranking industries of the United States. Cement is used in modern construction from fence posts and scraping block up through tank, silo, residence, elevator, to skyscrapers and factory. Cement is one of the livest members of the building material fraternity. Simply from the standpoint of being on the job, the building material man must know cement, know how to use it, and know how to sell it. It might then be called a matter of duty, and the dealer should provide himself with adequate facilities for supplying his community's requirements. If he is a live merchant, and, believe me, the lumbermen I am acquainted with, without exception, are live merchants, he should so thoroughly acquaint himself with the use of cement that he can give his trade the best possible advice relative to concrete construction.

Another phase of the proposition appeals to the majority of us even more strongly than the altruistic consideration of what we owe the community. The dealer should handle cement as a cold business proposition. It is a legitimate article of commerce, for which there is a steadily increasing demand, and is a commodity which can be handled with a minimum danger of loss, and a maximum assurance of steady, normal profit. The handling of cement calls for a small investment and, from its very nature, enables the dealer to make frequent turnovers. Even at a narrow margain of profit per turnover, it assures a good liberal return on actual investment. I am quite sure that many dealers entirely overlook this feature of the handling of cement and fail to realize the returns that they are securing from this part of their business. I would urge that each and every dealer keep a careful record for one year of his cement business and make comparisons with other commodities he is now handling. The results would change many a lumber man to a material man. And do not forget that cement business is not only valuable in itself; it has carried and will carry with it, other demands from the consuming public, and an additional volume of business that would undoubtedly be diverted to other channels, were the dealers to discontinue the sale of Portland cement.

I have sometimes heard of dealers who have thought of discontinuing the sale of this product. They have overlooked the size and character of their profits and have over-stressed the handling of the cement and of the sacks as a rather dirty job. To any such, I will only say that no such move should be made without careful consideration, as the handling of Portland cement will be an increasingly important part of every material dealer's business. Cement has shown its power of sustained growth in the past decade. Applied to the future, that power spells big things for the dealer who pays proper attention to the development of his cement trade.

I find that dealers, quite generally, will admit that they do not devote the energy to the sale of Portland cement that they devote to the sale of lumber. Time does not permit me to discuss the reasons that they give, but I would like to suggest at this time that if the dealers would try the experiment of endeavoring to sell a small amount of cement for some new use, or for some added improvement every day, the results would be so satisfactory that the dealers would become "boosters" for the cement business. I know of a few such dealers and it is surprising what a difference it makes in the cement they handle and in the results they get from their business as a whole. If a farmer is putting on his wagon a load of lumber, they ask if he does not need a few sacks of cement for a well curb, or a platform, or for the construction of a foundation under the barn or corncrib he is to construct. If the farmer does not realize the advantage of concrete over loose stone, this dealer very quickly converts him on the subject and promptly figures out to him how much sand, cement, and stone will be needed for said construction. The result is that the dealer has a sale he would not otherwise have had, the farmer has an improvement that he is proud of, the cement manufacturer has some additional business, and all parties to the transaction have been benefited thereby.

I am for promotion work—promotion work of this kind and of all kinds. Personal call, telephone, mail, local papers should all be used. I have seen it work out in profits too many times to doubt. The dealer who pushes, promotes, and speeds up demand generally gets paid way out of proportion to the effort he expends. I am connected with a company that believes in advertising for the dealers. Naturally, I believe in the dealers advertising for themselves.

I would like to suggest that when you go home you make a thorough survey of your stock, or look over your inventory, and make up your mind to broaden your field and to increase your usefulness in your community by bringing to the attention of all the people, fairly and without partiality, the advantages of the various materials available for use in their construction, and endeavor to secure for your people the maximum return, all things considered, for their investments. In doing this you will be serving others, but, at the same time, you will, I believe, be best serving yourself.

This matter was brought to my attention quite forcibly two or three years ago by a prominent lumberman who owns several yards. He refused to push the wood stave silos that were being sold by many lumbermen and, instead, encouraged a contractor for monolithic reinforced concrete silos to enter his communities and take contracts for concrete silos. He stated to me that while he could get a more attractive profit from the sale of the wood silos, he would much prefer that his people should have the permanent concrete silos. He knew that the wood silos would not prove satisfactory in the long run and, if he urged his people to buy them, their dissatisfaction in the future would more than offset the slight gain he might make temporarily. Furthermore, he was convinced that the added prosperity to his communities from the use of the monolithic concrete silos would bring to him a great deal of business in time to come.

Let us have, then, in our towns and in our cities, material men; experts who will push the right thing for the right purpose; money makers who will have in mind their duty to their communities, as well as their duty to themselves. The cement manufacturers want nothing more.

* Address before the twelfth annual convention of the Arkansas Association of Retail Lumber Dealers, Pine Bluff, Ark., May 27.

Uniform Cost Systems.

By Walter S. Sheldon.

The most insistent problem which faces the manufacturer under present competitive conditions is that of costs. Upon this subject has been centered the earnest attention and careful study of every man who has made a success in his individual business, and upon the accuracy and completeness of his knowledge of costs depends the measure of success which he may attain.

Since the subject of costs is a fundamental problem applying to all business, and in its importance ranks easily first, it follows that the study of costs as applied to the individual operator has been highly specialized and very thoroughly developed in application to many industrial plants.

There is, however, a still further development of the study of costs to which attention has only recently been directed, and that is the application of a uniform cost system to a whole industry, and from such application deriving a two-fold benefit. First, in standardizing cost accounting as applied to that particular industry. Second, by comparison, giving to the members of that industry the first true and scientific basis of comparison of production costs, which they have ever been able to secure.

A mere collection of facts gathered upon any subject, which bear no relationship to each other are practically of little value, it is only when truth is arrived at by the correlation of facts that we have a useful and workable basis for knowledge. The industrial engineer usually finds a very exact knowledge of some items of cost in every business, which he investigates, but rarely finds a cost system in operation which is clear, comprehensive and offering a correct summary of all the items which properly enter into cost.

In extending his study to different manufacturers or operators in the same line of business no basis of comparison, whatever, can be found; for each man differs from the other in the physical advantages of his plant, the arrangement and method of operation, the cost of raw material and labor and the method of accounting and cost keeping.

To illustrate, if five men each had a perfect cost system illustrating their own operations and should bring these different figures together for purposes of comparison it is obvious that no correct conclusion could be drawn from perfectly correct figures because of a lack of uniformity. If therefore these five men were brought into a uniform system of cost accounting, the facts then stated with equal accuracy would be illuminating, because they would bear a definite and scientific relationship and would be comparable. Such figures could be published by an industrial secretary without disclosing the plant or operator which they represent, and each of the five men would find in the tabulation his own figures compared with others in such a way that no secrets were revealed but trustworthy and essential information could be secured therefrom.

The day of individualism is passing and facts which were once considered vital and were guarded with jealous care are now being looked upon in the light of the broader policy of trade coöperation and association, and it needs no prophet to declare that the coming policy in business is to be more and more a policy recognizing open markets, open prices and open coöperation.

It is unfortunately true that many businesses are carried on, prices fixed and markets developed with only a partial knowledge on the part of the individual as to his own costs of operation and a total lack of information as to the operating costs of competitors, the result being invariably a waste of opportunity, the loss of reasonable and necessary profit and the demoralization and discouragement of each individual operator, lost in a fog of misinformation, fear and suspicion and with the fixed and settled policy of tearing down, by underselling, the mutual prosperity of his association.

Uniform cost systems are new only in the sense that they are an application of costs to a wider field than heretofore. If any association of manufacturers or operators adopted a uniform system of cost accounting and placed this system beyond the suspicion of inaccuracy or incompleteness some very important results would inevitably follow.

First, by collating and publishing certain information regarding the average costs (without revealing the individual operator or in any way giving confidential data to a competitor) each individual so reporting has at hand an indicator as to the efficiency of his own operations in comparison with others.

Second, the individual has the steadying assurance that others are producing the same goods at definite comparative costs.

Third, a general knowledge of uniform costs inevitably serves to steady quotations and to lift the average range of prices in an association.

Fourth, it is a new and practical link binding together the members of an association, who have been loosely held before in association work that was either technical and educational or purely social.

I have outlined, briefly, a subject which invites the consideration of the progressive manufacturer who believes in his trade association and who would like to help the association and have from it not only technical advantages but the particular advantage which is expressed in increased profits and greater satisfaction in carrying on his business. I know of no other way in which the associated effort of American manufacturers can be carried so directly and practically toward better trade conditions, better coöperation and increased profits as by the application of a uniform cost system, based upon a thorough study of the peculiar needs and conditions and adopted with scientific precision to show the facts vital to the success of all, without revealing individual and confidential information and without destroying the individual advantage or freedom of action which each member properly exercises.

NEW YARD FOR HOUSTON BROS. CO.

Houston Brothers Co., Pittsburgh, Pa., is well satisfied with this summer's business to date. The great trouble is in getting shipments through fast enough to satisfy its customers. The company's big yard at East Liberty is well stocked and is very busy and also its yard at Liberty avenue and Thirty-third street. In order to take care of its rapidly growing south side trade, this concern has secured a site at Carson and Second streets, where it is establishing a builders' supply yard and has started a large warehouse. It will have the advantages of the Pittsburgh & Lake Erie and Pennsylvania shipments and will be only one square from the central downtown district. Almost directly across the street two inclines and the proposed team tunnel through the south hills make easy access to all the residence sections south of Mt. Washington, where building is the most active of any place in the city this summer. The company reports an increase of about twenty per cent in its city business over last year and says that in nearly all respects business is unusually good.

NEW BUILDING LAW OPPOSED.

The proposed new building law for Los Angeles, which its framers assert is the finest building law yet devised in America, has already aroused a lot of opposition. Protests against its adoption have been filed by several dozen of the leading material men, contractors and builders in Los Angeles.

The Real Estate Board and the Builders' Association of Kansas City are both active in the preliminary discussions of the proposed new charter and building code of Kansas City.

Brevities of the Retail Trade.

F. W. Enderby has bought the lime, cement and lumber business of J. A. Moore at Palmdale, Cal.

The Mentone Lumber Co., Mentone, Ind., has practically completed its new lumber sheds. The entire stock of lumber is now under cover. The cement warehouse is damp-proof, having wintered a car of cement without having it become warehouse packed. Mr. Eberle is manager.

The Huntertown Grain Co., Huntertown, Ind., is adding an additional line to its already extensive building supply business. The company has erected a large double-decked lumber shed and is stocking it with high-grade lumber as rapidly as possible. Dan Stiner is manager and says he will "soon be prepared to bring home the bacon."

A new builders' supply firm at Lebanon, Pa., is Petty Brothers & Co., which has been formed lately by John and J. K. Petty and Thomas L. Here. It will handle sand, gravel, lime, stone, cement, etc., and will also have a coal yard.

The Algoma Fuel Co., at Algoma, Wis., which has recently expanded into the building material lines, is erecting a large warehouse. The building is especially constructed for storing building material and has dimensions of 74 by 120 feet.

The New England Steel Products Co. has taken a warehouse at Broadway and Third streets, Cambridge, Mass.. They specialize in building materials for general construction, including metal lath, steel frames and reinforcing steel. Their yard is equipped with bending and cutting machines, and the new company is making headway under the management of R. C. Hunter. Mr. Hunter is a civil engineer who recently returned to Boston after several years in construction work in New York City. The company also handles concrete design and fabricates the steel for the plans made.

MICHIGAN JOINS THE RANKS.

A meeting of the retail dealers of the city of Grand Rapids, Mich., was held on Tuesday, June 6, for the purpose of arranging for a meeting at which retailers of the surrounding countries will be invited to hear and study the plans of the National Builders' Supply Association as embodied in the district committee movement. The retailers were addressed by Haydon S. Gaines, field secretary of the association and thought so well of the proposition that every one present joined the association. Tentative plans were made for a meeting of the dealers in the district to be held at the Commercial Club, Grand Rapids, on Tuesday afternoon, June 13, at two o'clock. It is the belief of Mr. Gaines that the meeting will be well attended and result in the formation of a district organization in Michigan which will be the forerunner of further work along this line in the state.

NEW INCORPORATIONS AND VENTURES.

The Associated Building Materials Corporation, Los Angeles, Cal., capital, $10,000; incorporators, H. J. Harrison, H. W. Logan and C. H. Zeus.

The Builders' Material Co., Cincinnati, Ohio, capital, $5,000; for the purpose of handling building materials; incorporators, August and Gordon Stamm, Otto Diemer, William H. Geis and Albert Diemer.

The City Fuel Co., La Crosse, Wis.,; incorporators, R. W. Keyes, Mrs. R. W. Keyes and J. A. Thwing. A line of building material will be handled.

The H. B. Taylor Building Co., Louisville; capital, $5,000; incorporators, H. B. Taylor, B. F. Zimmerman and I. M. Matlack.

The Saint Louis Co., Ltd., Montreal, Can.; to deal in builders' supplies.

Association News

Important Communications and Notices from Officials of the Various Organizations and Records of Recent Happenings

James H. Allen, President, National Builders' Supply Association, Lincoln, Neb.
Charles M. Kelly, President, New England Builders' Supply Association, Providence, R. I.
Frank H. Genung, President, Mason Material Dealers' Association of New Jersey, Newark, N. J.
W. O. Holst, President, Ohio Builders' Supply Association, Toledo, O.
B. L. Grove, President, Del-Mar-Col Builders' Material Dealers' Association, Washington, D. C.
H. E. Shadle, President, West Virginia Lumber and Builders' Supply Dealers' Association.

NATIONAL BUILDERS' SUPPLY ASSOCIATION.

Lincoln, Neb., June 3, 1916.

Fellow Members: That the objects of the National Builders' Supply Association are meritorious and when properly presented meet with the approval of retailers in all parts of the country is evidenced by the fact that forty-six new members have been received from the state of Wisconsin since the last issue of ROCK PRODUCTS AND BUILDING MATERIALS. In a number of instances where field workers of the association have been busy, the records show a membership of 100 per cent of the retailers called upon. A few more meetings are scheduled for the state of Wisconsin next week and, with a continuance of the same enthusiasm as has been shown, that state will be perfectly organized in a very short period of time.

The activities of Field Secretary Gaines are being transferred to the state of Michigan and from early reports the dealers in that commonwealth are eagerly awaiting the call to join the ranks.

The Indiana division has planned a summer meeting and outing at Lake Maxintuckee on July 22. This will be the first opportunity for all of the Indiana members to get together.

A meeting of the board of directors of the association will soon be held in Chicago and plans for the further continuance of the work will be discussed at that time.

Your president and all the other officers of the association stand ready to assist retailers, either individually or collectively, in time of need. Freight rates, negotiations with manufacturers, state legislation, and organization work are features of the builders' supply business that we are in a position to handle in a very satisfactory manner. The president welcomes letters from retailers, whether they are members of the asscciation or not. Write me your troubles, addressing your letters either to the National headquarters at Chicago or care of the Nebraska Materials Co., Lincoln, Neb.

JAMES H. ALLEN, President,
National Builders' Supply Association.

WEST VIRGINIA LUMBER AND BUILDERS' SUPPLY DEALERS' ASSOCIATION.

Charleston, W. Va., June 2, 1916.

Fellow Members:—My one great desire as president of your association is to promote and perpetuate close co-operation and organization interest. Best business interests seem to demand it, and life is so short that we are all entitled to all the pleasure we can derive from, not alone the feeling of sociability, but the actual encounter and community with our competitors.

We can all remember the time not far in the past, when we had a feeling that our competitor was something that we should shun like we would the smallpox, but fortunately we have learned that he is a man like ourselves, breathing the same air, fearing the same God and loving the same flag, and often that he is just about as good a man in every respect as we are, and is not, after all, such a bad fellow to know.

There is an old and trite adage that "The road to a man's heart lies through his stomach," and if this be true, as we believe it is, there is no means that will so greatly assist in opening our hearts to each other as over the dinner table.

With this thought in view we, several months ago, adopted the plan of taking lunch together once every week, which we do on Wednesday at the noon hour. We have not been able to interest all of our members in this movement, but a few of us have been following this plan and we find that nothing has more of a tendency to keep up a good feeling between us and to keep a live interest in the association work. While we have no rules governing these meetings, we have come to accept it as an "unwritten law" that "shop" shall not be talked, as we all understand it is purely a social meeting for the purpose of becoming better acquainted. However, it is very gratifying to note the good that our meetings do, and the jovial, satisfied feeling with which each member of the party leaves the dining room, and the reluctance with which the meeting is finally broken up.

I would like to see this same plan adopted by all the communities inhabited by our membership, wherever there are two or more members; and I ask that each member of our association appoint himself a committee of one to take the initiative in his own community in bringing about this organized plan, and to make it his personal business to see that it is perfected and perpetuated.

After this is done the little discussions that are interesting to the association will naturally follow as a matter of course, and I have no doubt that it will result in much good to each individual member, to each locality or community and to the association at large. We have many questions of vital importance to come before us during this present year, and it behooves each of us to "put his shoulder to the wheel." I would be glad to receive communications at any time from our members or prospective members along these lines, and gratified to know that my suggestion is being put to the practical test.

H. E. SHADLE, President,
W. Va. Lumber & Builders' Supply Dealers' Ass'n.

SCHEDULED MEETINGS.

June 13—Meeting of retailers in Grand Rapids, Mich., district, Commercial Club, Grand Rapids, 2 p. m.

June 22—Wisconsin District Committee No. 9, Park hotel, Madison, Wis., C. F. Cooley, chairman, 7 p. m.

June 23—Meeting of retailers in La Crosse, Wis., district, 7 p. m.

June 24—Wisconsin District Committee No. 1, Wisconsin hotel, Milwaukee, Wis., 7 p. m.

July 22—Indiana Division, National Builders' Supply Association, Lake Maxinkuckee, Culver, Ind., first summer meeting.

July 27-29—Ohio Builders' Supply Association, Breakers' hotel, Cedar Point, Ohio, annual summer outing.

OHIO BUILDERS' APPEALS FOR MEMBERS.

Cincinnati, O., June 3, 1916.

Fellow Members: After long persistent and continuous efforts, the Ohio Builders' Supply Association have succeeded in securing a differential of 10 cents per barrel for hauling cement f. o. b. cars. To maintain that differential of 10 cents on carload business, means a great improvement in both the wholesale and retail building supply business and to achieve that success, requires the united support of every building supply dealer in the state of Ohio.

It is the aim, purpose and intention of our organization to use every effort, both with the manufacturer and the dealer to maintain this commission of 10 cents per barrel on carload cement business. To maintain this 10 cent differential means to place the building supply business in the state of Ohio on a higher level and the only way for us to succeed is to have the united support of each and every dealer, not only as an individual but as a member of this association.

To have such an organization, which means a live organization, requires your support, your membership and your efforts in your immediate vicinity, to have other dealers become members of this association. This means, not only a strong state organization but it means better business methods in your immediate vicinity. We are thoroughly convinced of the fact that the dealer who gives a square deal, usually gets a square deal in return. If you expect to avoid misunderstandings, improve your local conditions, you will have to go to the source of your local troubles to remove the cause of the trouble, which is frequently local misunderstandings. Our state association has many duties, but its principal duty is to remove misunderstandings. The clear light of facts often makes wonderful changes with a sick patient. The "Corliss Engine" is a beautiful lesson of the benefits of organization. How quietly, how perfectly, how true and how exact it accomplishes its work and how wonderful are its results. The lesson it teaches is the benefits of organization. But it teaches more, that to have a correct organization, it must be formed along true and correct lines.

You, no doubt, believe in organization, you no doubt realize what an organization really can and should accomplish. You know beyond the question of a doubt that it is only an organization that can and will maintain better conditions, so why hesitate in becoming a member. Or, if a member, why hesitate in securing additional members.

As you expect prompt service through a good organization, we are awaiting your prompt reply.

W. O. HOLST, President.
F. H. KINNEY, Secretary.
Ohio Builders' Supply Association.

INDIANA DEALERS IN SUMMER OUTING.

The first summer meeting of the Indiana Division of the National Builders' Supply Association will be held on Saturday, July 22, at Lake Maxinkuckee, Culver, Ind.

This meeting will consist of a gathering on that day of all the dealers of the various district committees of the Indiana Division.

The program has not as yet been completed, but contemplates a very active meeting. The perfection of district committees within this state is a matter of daily attention and while all of the districts have not as yet reached the efficiency which they should possess, the fact remains that it will be only a question of time and some little work before that condition has arrived.

It is expected that practically all of the members will be in attendance at this meeting and arrangements are such that the members of their family will also accompany them.

The spot selected for the outing is one of the finest places in Indiana and the dealers in that section who are thoroughly organized will properly care for the comfort of visiting dealers.

Wisconsin Retailers Hold Enthusiastic Meetings

For the past two weeks the activity of the National Builders' Supply Association has been centered in the state of Wisconsin, where Field Secretary Haydon S. Gaines has been at work for the past six weeks organizing local districts and bringing into the membership of the National organization practically every retailer with whom he has come in contact. The same spirit and enthusiasm which has been shown at previous meetings in this state was also evidenced at these meetings, and as a result the National Builders' Supply Association has been strengthened by the addition of forty-six members.

The services of ROCK PRODUCTS AND BUILDING MATERIALS and manufacturers shipping into the Wisconsin district were placed at the disposal of the association in their campaign for members in the state. At every meeting the field secretary was accompanied by at least two and, in some instances, as many as six visitors who endorsed by their presence and assisted by their efforts the movement of the National association to place the Wisconsin dealers in a strong organization as a state division, which, when completed, will have the whole-hearted support of district committees scattered throughout the commonwealth and whose membership will be practically 100 per cent strong.

At all of the meetings Mr. Gaines was the principal speaker and the effective manner in which he presented the merits of the National Builders' Supply Association as embodied in the district plan of organization was evidenced by the prompt responses on the part of building material dealers when urged to become members of the association. In the state of Wisconsin today there are 160 retail dealers affiliated with the National organization.

The recent meetings were held at Appleton, Green Bay, Fond du Lac, Sheboygan, Eau Claire and Madison. The present program of the association calls for three more meetings in the state which will be held at Madison on June 22, La Crosse on June 23 and Milwaukee on June 24. It is hoped that by the last-named date the complete organization of the state of Wisconsin will have been effected and the services of Mr. Gaines will then be transferred to the state of Michigan where retailers who have read of the activities of the association in ROCK PRODUCTS AND BUILDING MATERIALS have urged the association to effect an organization.

All of the retailers in the state of Wisconsin are not as yet members of the association. Outagamie is the banner county in the state, having every one of its twenty-one retailers affiliated with the association. Following Mr. Gaines in Wisconsin, H. W. Coates, who is also on the staff of the association, will call upon such dealers as are not now affiliated, with the object in view of educating them upon the advisability of associating with others in the same line of business in an endeavor to improve the conditions of the industry by studying methods of cost accounting and the handling and selling of their products.

The Appleton Meeting.

A meeting of District Committee No. 2 was held at the Sherman hotel, Appleton, Wis., on May 22. After partaking of a supper Rufus C. Brown, Jr., of Oshkosh, chairman of the district, called the meeting to order and recited in a brief manner the history of the N. B. S. A. movement in the state of Wisconsin. He urged every retailer present to join the association at the earliest possible moment and thereby make District Committee No. 2 the first division in the state to become perfectly and permanently organized.

Stephen D. Balliet of Appleton was then called on. He told of some of the accomplishments of the association already effected in the state and went into detail on the possibilities of a complete district organization which would be joined with every other district into a state organization and through the various states into a National body.

G. A. Olsen of ROCK PRODUCTS AND BUILDING MATERIALS spoke on the successful manner in which the retailers of Outagamie county are handling the material requirements of the state highway commissioners in the construction of 100 miles of new concrete highway and of its moral influence on retailers in other parts of the state, as well as on dealers throughout the country.

Mr. Gaines was introduced as the live wire of the National Builders' Supply Association, and the man who is putting the state of Wisconsin on the map as far as the building material industry of the country is concerned. Mr. Gaines modestly accepted the compliment and made an eloquent address on the accomplishments of the National Builders' Supply Association during its seventeen years of activity, but placed special stress on the hearty manner in which the dealers of Indiana and Wisconsin are endorsing the movement by affiliating with the association. He quoted at length from an address delivered by Edward N. Hurley, vice-chairman of the Federal Trade Commission, before the cement manufacturers at the Chicago convention on May 10, wherein Mr. Hurley assured the manufacturers and the merchants of the country that the government

M. B. HELMER,
Chairman, Wisconsin District Committee No. 3, N. B. S. A.

was ready and anxious to co-operate in every way possible in the formation of trade associations for the purpose of investigating and improving trade conditions as they are affected by production, handling, sale and delivery and the manner in which these various phases of the retailer are affected by cost accounting methods.

At the close of his address the following firms made application for membership in the association:

Cargill Grain Co., Clintonville.
C. J. Pomner, Waupaca.
R. M. Falk, Embarrass.
Winneconne Lbr. Co., Oshkosh.
Kurz Fuel Co., Oshkosh.

The meeting was attended by the following-named men:

Rufus C. Brown, Jr., Cook & Brown Lime Co., Oshkosh, Wis.
Haydon S. Gaines, National Builders' Supply Association, Chicago.
Stephen D. Balliet, Balliet Supply Co., Appleton, Wis.
Chris. J. Pommer, Waupaca, Wis.
Harry Wall, Winneconne Lumber Co., Oshkosh, Wis.
R. W. Getschow, Ideal Lumber & Coal Co., Appleton, Wis.
Peter Renn, Renn & Co., Kaukauna, Wis.
Arthur A. Stade, Sandusky Cement Co., Chicago, Ill.
C. L. Marston, Marston Bros. & Co., Appleton, Wis.
William F. Piehl, Miller & Piehl, Seymour, Wis.
John F. Heddinger, Ideal Lumber & Coal Co., Appleton, Wis.
Ed. C. Schmidt, Ideal Lumber & Coal Co., Appleton, Wis.
M. Alberty, Stier-Alberty Co., Appleton, Wis.
George H. Wilson, Wilson Lumber & Fuel Co., Kaukauna, Wis.
J. Christoph, Twin City Fuel Co., Neenah, Wis.
J. C. Lemberg, Lehigh Portland Cement Co., Chicago, Ill.
J. Lummerding, J. Lummerding & Son, Kaukauna, Wis.
Mr. Pride, Pride & Hough, Neenah, Wis.
J. G. Zimmerman, Lehigh Portland Cement Co., Chicago, Ill.
R. M. Falk, Embarrass, Wis.
H. H. Plummer, Menasha, Wis.
J. N. Wergner, Black Creek, Wis.
A. M. Mayo, A. M. Mayo & Co., New London, Wis.
Will Tait, Bear Creek, Wis.
C. O. Davis, Welcome-Shiocton Lumber Co., Bear Creek, Wis.
D. Tanty, Cargill Grain Co., Clintonville, Wis.
E. W. Breyer, Breyer & Langman, Medina, Wis.
C. Langman, Breyer & Langman, Medina, Wis.
Edw. Grebe, Brenner & Grebe Fuel & Supply Co., Kaukauna, Wis.
J. M. Jensen, Kaukauna Lumber & Manufacturing Co., Kaukauna, Wis.
Leslie Johnson, Neenah, Wis.
G. W. Coonen, Coonen Bros., Dundas, Wis.
George A. Olsen, ROCK PRODUCTS AND BUILDING MATERIALS, Chicago.

Green Bay Meeting.

The day following the meeting at Appleton, members of District Committee No. 1 of the Wisconsin Division met at the Beaumont hotel, Green Bay, Wis. During the serving of a delicious supper, a business session, presided over by Enos Colburn, secretary of the committee, was conducted.

Mr. Colburn introduced Mr. Balliet of Appleton, who reviewed the conditions in Outagamie, Waupaca and Winnebago counties since the dealers of that territory have become affiliated with the National Builders' Supply Association.

Mr. Balliet was succeeded by Julius Lemberg of the Lehigh Portland Cement Co., who in a brief but practical manner told of the happy experiences salesmen on the road have with retail dealers when fair margins of profit are being made on the goods sold by such retailers. Mr. Stade of the Sandusky Cement Co. and John C. Larimer of the Universal Portland Cement Co. substantiated the remarks of Mr. Lemberg.

Mr. Olsen followed the cement salesmen on the program by a talk on a uniform cost accounting system and the necessity of building material dealers to study their common questions in an organized body. The talk precipitated an interesting discussion in which Mr. Colburn, J. W. Otis of Antigo, H. G. MacFarlane of Oconto, W. J. Schumocher of Shawano and others took part.

Due to the resignation of Fred Hurlbut as chairman of the district committee, the election of a new chairman was an important feature of the evening's business. H. A. Dumdey of the Denmark Lumber Co., Denmark, Wis., was honored with that position.

Mr. Gaines was the final speaker of the evening and followed his line of talk at the Appleton meeting, with the result that the following named firms became members of the association:

Back Kieweg Co., Kewaunee, Wis.
Fuhrman Bros., Bowler, Wis.
Andrew Mader, Gresham, Wis.
The Duvall Co., Kewaunee, Wis.
Upham & Russel Co., Shawano, Wis.
Donohue Coal & Wood Co., Antigo, Wis.
Denmark Lumber Co., Denmark, Wis.
Lyon Brothers, Menominee, Mich.
Jas. A. Urguhart, Oconto, Wis.

The attendance at this meeting was as follows:

W. J. Schumocher, Shawano Fuel Co., Shawano, Wis.
H. A. Dumdey, Denmark Lumber Co., Denmark, Wis.
Arthur A. Stade, Sandusky Cement Co., Chicago, Ill.
James L. Donohue, Donohue Coal & Wood Co., Antigo, Wis.
J. G. Zimmerman, Lehigh Portland Cement Co., Chicago, Ill.
J. C. Lemberg, Lehigh Portland Cement Co., Chicago, Ill.
C. V. Lyon, Lyon Bros., Menominee, Mich.
H. G. Fuhrman, Fuhrman Bros., Bowler, Wis.
Andrew Mader, Gresham, Wis.
J. J. Basten, New Franken, Wis.
D. S. Colburn, F. Hurlbut Co., Green Bay, Wis.
Will E. Draeb, The Duvall Co., Kewaunee, Wis.
R. C. Bach, Bach-Kieweg Co., Kewaunee, Wis.
H. G. MacFarlane, Oconto, Wis.
D. X. Brands, Union Manufacturing Co., Oconto Falls.
John C. Larimer, Universal Portland Cement Co., Chicago, Ill.
J. W. Otis, Antigo, Wis.
L. U. Washburn, N. S. Washburn Lumber Co., Sturgeon Bay, Wis.

Enos Colburn, Abrams Lumber Co., Green Bay, Wis.
Phil A. Haevers, Haevers & Co., Green Bay, Wis.
E. E. Cowell, The Duvall Co., Kewaunee, Wis.
Stephen D. Balliet, Balliet Supply Co., Appleton, Wis.
J. H. Flatley, Flatley Bros. Co., Green Bay, Wis.
Haydon S. Gaines, National Builders' Supply Association, Chicago.
h. A. Upham, Upham & Russell Co., Shawano, Wis.
James A. Urquhart, Oconto, Wis.
L. Pirlot, East River Lumber & Fuel Co., Green Bay, Wis.
George A. Olsen, ROCK PRODUCTS AND BUILDING MATERIALS, Chicago.

The Fond du Lac Meeting.

The third meeting of the week in the Wisconsin division was held at the Erving hotel, Fond du Lac, Wednesday, May 24. During the course of the supper M. B. Helmer, chairman of the division, prevailed upon Mr. Balliet, of Appleton, to preside at the meeting. With a few preliminary remarks, Mr. Balliet called upon Rufus C. Brown, Jr., chairman of District Committee No. 2, to explain the reason why the Fox River Valley Association became interested in the National Builders' Supply Association movement.

Mr. Brown explained that because of the narrow scope of the Fox River Valley, the dealers were not receiving the satisfactory results from their association that seemed possible through membership in an association which covered the entire country. With this object in view and, after having read in ROCK PRODUCTS AND BUILDING MATERIALS of the work the association was doing in the state of Indiana, a request was sent to President J. H. Allen of the National association, for an explanation of the objects of the National association. Later a field secretary or organizer was asked for and, accordingly, Mr. Gaines was sent into the territory and the dealers already have secured much more satisfactory results than was anticipated in so short a time.

To impress upon each man present the importance of every man working for the association, Mr. Brown used the phrase, "You get out of an association just exactly what you put into it."

Mr. Olsen spoke for a few moments on the benefits of organization, emphasizing the benefits possible from the interchange of ideas at the meetings and basing his arguments on an actual experience which occurred at the supper table.

L. A. Pettibone, contracting engineer of the Marquette Cement Manufacturing Co., Chicago, explained the reason why cement manufacturers have approved of the National Builders' Supply Association, by stating that where the dealers have an organization and can place with the manufacturers an accurate list of retail building material dealers of the district, little if any trouble would be had in the distribution of cement through the channel of the retail trade.

James G. Zimmerman, assistant advertising manager of the Lehigh Portland Cement Co., who had attended the Appleton and Green Bay meetings, spoke briefly on the cement manufacturers' attitude toward associations of retail dealers. He emphasized the fact that at the meetings he had attended the dealers were displaying an unusual amount of enthusiasm toward the National Builders' Supply Association. A remark which told in a few words the opinion of the cement manufacturers toward retailers was incorporated in the words, "The cement manufacturers realize and appreciate the retail dealer as the proper channel of distribution."

John J. McCoy of the Streator Brick Co., Streator, Ill., stated the attitude of the face brick manufacturers toward the establishment of dealers by saying that they were "anxious to establish, wherever possible, reliable dealers for the sale of their products."

Fred W. Ducat of the W. H. Pipkorn Co., Milwaukee, spoke of the willingness on the part of the manufacturers and jobbers to co-operate with and sell their products through retail dealers. In speaking for the association, he said, "The dealers must not expect to sit down and let the manufacturers and jobbers do all the work because they have formed an association. That is not the association idea. It is to strengthen the dealers' own belief in his work and through co-operating with the manufacturers and jobbers secure a larger and more profitable business in his respective community."

Field Secretary Gaines reviewed the history of the National Builders' Supply Association with special reference to the work in the states of Indiana and Wisconsin. He stated that in one or two instances members of the association had complained that upon presenting grievances to the National office at Chicago the matter had not been immediately corrected. He referred to the desire of the association to correct the evils which exist, but stated that these things naturally take time. He said in part: "At the present time each manufacturer has a sales policy which has been in existence for a number of years and sells his products in accordance with that policy. You can't expect him to change that policy in a day. As soon as the dealers are permanently organized and in a position to present in concrete form a practical method of retailing supplies through the dealer, such changes as are desired will be secured." He again quoted from Mr. Hurley's address to cement manufacturers.

B. E. Sampson, of South Byron, told a few interesting anecdotes to illustrate how feeblue are the

W. J. NUSS,
Chairman, Wisconsin District Committee No. 4, N. B. S. A.

efforts of mankind when we attempt singly to work in harmony with competitors. He emphasized the point that frequently retailers are told by shrewd customers what the "other fellow" is willing to sell his materials for, when, as a matter of fact, the other fellow has never been seen. He urged the retailers to put more faith in their competitors and less confidence in the gossip of such consumers. In a laconic way he urged the dealers to "be square; if you can't be square, be as square as you can." Mr. Sampson referred to the government's interest in associations as outlined by Mr. Gaines in his talk and complimented the country on following the examples laid down by England and Germany. His reason for joining the association was given in the following words: "My idea of joining the association was to get in on the ground floor. This nation is going to succeed, at home as well as abroad, and the Federal Trade Commission, through encouraging a uniform cost accounting system, is going to make it easier to have prices practically uniform. You know then that if your competitor cuts the price to a point where you cannot compete with him he is losing money."

In urging the dealers in the Fond du Lac district to join the association, Mr. Balliet referred to local state pride by saying: "We ought to see that Wisconsin has the best building material organization in the country."

The following new members were secured at this meeting:

J. M. Rodger, Fox Lake.
D. Dickinson Lbr. Co., Beaver Dam.
C. Starkweather & Son, Beaver Dam.
C. S. Porter, Fox Lake.
J. F. Grahl, Eden.
Peter Nett & Co., Peebles.
Mt. Calvary Coal & Lbr. Co., Mt. Calvary.

The attendance at the Fond du Lac meeting was as follows:

C. Henningsen, Oakfield, Wis.
P. W. Wolf, Richfield, Wis.
John Bertram, Malone, Wis.
W. J. Kaufman, Oak Center Lumber & Fuel Co., Oak Center, Wis.
J. McGawan, North Fond du Lac, Wis.
Frank Nett, Peter Nett & Co., Peebles, Wis.
Arthur Vogel, Mt. Calvary Coal & Lumber Co., Mt. Calvary, Wis.
Herman J. Abler, Mt. Calvary Coal & Lumber Co., Mt. Calvary, Wis.
C. F. Kohlmann, Mt. Calvary Coal & Lumber Co., Mt. Calvary, Wis.
F. W. Ducat, W. H. Pipkorn Co., Milwaukee, Wis.
J. G. Zimmerman, Lehigh Portland Cement Co., Chicago, Ill.
Stephen D. Balliet, Balliet Supply Co., Appleton, Wis.
M. B. Helmer, Helmer Milling Co., Fond du Lac, Wis.
Haydon S. Gaines, National Builders' Supply Association, Chicago, Ill.
Rufus C. Brown, Jr., Cook & Brown Lime Co., Oshkosh, Wis.
Henry Kurz, Kurz Fuel Co., Oshkosh, Wis.
C. W. Henry, Henry Bros., Fond du Lac, Wis.
J. F. Grahl, Eden, Wis.
P. F. Werth, North Fond du Lac, Wis.
J. Listay, Helmer Milling Co., Fond du Lac, Wis.
C. S. Porter, Fox Lake, Wis.
John J. McCoy, Streator Brick Co., Streator, Ill.
L. A. Pettibone, Marquette Cement Manufacturing Co., Chicago, Ill.
J. M. Rodger, Fox Lake, Wis.
C. A. Starkweather, Beaver Dam, Wis.
W. C. Dickenson, Beaver Dam, Wis.
S. P. Gladney, Beaver Dam, Wis.
P. F. Boulay, P. F. Boulay Bros. Co., Fond du Lac, Wis.
O. V. Neeb, Oak Center, Wis.
George Olmsted, Helmer Milling Co., Fond du Lac, Wis.
B. E. Sampson, South Byron, Wis.
George A. Olsen, ROCK PRODUCTS AND BUILDING MATERIALS, Chicago, Ill.

The Sheboygan Meeting.

Following the meeting at Fond du Lac, a session of District Committee No. 4, was held at the Grand hotel, Sheboygan, Thursday evening, May 25. W. J. Nuss, secretary of the Pantzer Lumber Co., is chairman of this district and as a feature of the evening's session interspersed the various courses by talks from retailers located in the district. Among the speakers were Henry Sheele of Sheboygan, O. W. Timm of Plymouth, Miss E. H. Roth of Sheboygan and E. E. Spindler of Manitowoc.

Following the supper, Stephen Balliet of Appleton was called upon and gave a very inspiring, though short, address on the accomplishments of the week's meetings. He bespoke the feelings of the men who made the circuit in the words: "It is inspiring to see the enthusiasm shown at these meetings."

Representatives of various cement companies present, including E. E. Mick of the Universal Portland Cement Co., G. J. Lockley, of the Newaygo Portland Cement Co., and J. G. Zimmerman of the Lehigh Portland Cement Co., were called upon. Because of the presence of A. J. Whipple, sales manager of the Marquette Cement Manufacturing Co., each of these men, after making a few brief remarks, referred to Mr. Whipple as the spokesman of the cement industry for the evening.

Mr. Olsen talked on co-operation between retail dealers and cited instances of where such co-operation had produced direct and profitable results.

A masterly address was given by Mr. Whipple, in which he said in part:

"What a pleasure it must be to come together as you have. Yesterday the man next to you may have been an enemy to you, now he is your friend. Some of you may have come into this association for a selfish reason. Before the association is very old you will realize that is not the reason you are staying in. You will feel better toward one another and better toward yourselves. It is gratifying to note the progress made by the cement manufac-

turers in the last year or two as a result of the meetings which they have had for the purpose of becoming better acquainted and of studying the conditions of their industry.

"It is not for the National Builders' Supply Asciation, nor for the Wisconsin dealers, nor the Sheboygan dealers to share alone the prosperity that is sweeping over the country. In your association, don't get too selfish or too greedy. In your relations with the manufacturer, remember that the manufacturers have brought about the improved condition by establishing good business rules. You must exercise good common sense in the conduct of your business. When you go out to get business in a cut-throat competitive way you are not conducting your business in a practical manner. Find out the proper method of learning what it costs you to do business. There is every disposition on the part of the manufacturers to co-operate with the dealers in the conduct of their business. That is demonstrated by the numerous ways in which we are searching for methods to better ourselves and at the same time better the dealers. The manufacturers years ago decided there are two classes of buyers of cement—dealers and non-dealers. The definition of who constitutes a dealer has been drawn closer and closer in order to learn who in truth is a retailer."

Field Secretary Gaines once more—and for the fourth time that week—proved his ability as the best organizer the National Builders' Supply Association has ever had. With the same vim and enthusiasm displayed during the earlier part of the week, he talked on the same topics as at Appleton, Green Bay and Fond du Lac. The manner in which he appreciates the co-operation of the retailers themselves was evidenced by a remark he made in referring to the nine years that he has spent in organization work. He said that in the short time of five weeks almost 200 dealers of the state had joined the organization and stated, "Never in my life have I heard of such enthusiasm and met with such success. As soon as Mr. Gaines finished his talk practically every retailer in the room who was not a member of the association signed an application blank for membership, including the following:

B. W. Meidl, Whitelaw.
Knauf & Tesch Co., Chilton.
Henry Juckem, Chilton.
W. D. Scott & Co., Glenbulah.
The J. G. Johnson Co., Manitowoc.
Port Washington Lbr. Co., Port Washington.
John Wolf, Random Lake.
Kiel Mercantile Ass'n, Kiel.
Fuel & Supply Co., Two Rivers.

Those in attendance at this meeting were:

J. P. Staehle, The J. G. Johnson Co., Manitowoc, Wis.
O. H. Hertzberg, Hertzberg Bros., Sheboygan Falls, Wis.
John Wolf, Random Lake, Wis.
Louis Laun, Laun Bros., Elkhart Lake, Wis.
William L. Knauf, Knauf & Tesch Co., Chilton, Wis.
E. E. Spindler, J. G. Johnson Co., Manitowoc, Wis.
Miss E. H. Roth, Sheboygan Lime Works, Sheboygan, Wis.
August F. Luedke, Kiel Mercantile Association, Kiel, Wis.
E. M. Duecker, J. B. Laun, Kiel, Wis.
O. W. Timm, J. H. Timm Co., Plymouth, Wis.
Henry Scheele, Sheboygan, Wis.
E. E. Pantzer, Pantzer Lumber Co., Sheboygan, Wis.
William E. Hildebrand, Hildebrand Manufacturing Co., Sheboygan, Wis.
Stephen D. Balliet, Balliet Supply Co., Appleton, Wis.
A. J. Whipple, Marquette Cement Manufacturing Co., Chicago, Ill.
W. J. Nuss, Pantzer Lumber Co., Sheboygan, Wis.
H. S. Gaines, National Builders' Supply Association, Chicago, Ill.
Fred W. Ducat, W. H. Pipkorn Co., Milwaukee, Wis.
M. E. Helmer, Helmer Milling Co., Fond du Lac, Wis.
E. E. Mick, Universal Portland Cement Co., Chicago, Ill.
John E. LeMaire, Federal Asbestos Co., Milwaukee, Wis.
B. W. Meidl, Whitelaw, Wis.
G. J. Lockley, Newaygo Portland Cement Co., Grand Rapids, Mich.
H. K. Coates, National Builders' Supply Association, Chicago, Ill.
George A. Olsen, ROCK PRODUCTS AND BUILDING MATERIALS, Chicago, Ill.

The Eau Claire Meeting.

A meeting of the retailers in the Eau Claire district was held in the rooms of the Eau Claire Club, Eau Claire, Wis., on Wednesday evening, May 31. As at the meetings the previous week the retailers assembled around the festive board and after partaking of a sumptuous meal were called to order by B. G. Proctor, chairman of the district. Mr. Proctor spoke of the work conducted by Mr. Gaines in the Eau Claire district about a month ago when the first meeting was held and when eight retailers joined the organization. "At that time we didn't know what it cost us to handle cement or to conduct our business," said Mr. Proctor. "If we secured five cents over the price on track we used to think we were making five cents a barrel. The dealers in Eau Claire have not made money out of their cement sales, but the business on this product has been carried along by the sale of other materials. As long as we have a spirit of rivalry and jealousy we will not make anything. What we need is a spirit of co-operation. When we are thoroughly organized we will not have trouble in dealing with the manufacturers and others with whom we come in contact. We are trying to get organized so that we will have something to show the manufacturers when we ask for protection in the sale of the products they manufacture. It would taste good to make a little money and I believe this organization can help us do so."

After complimenting ROCK PRODUCTS AND BUILDING MATERIALS very highly on a number of the

B. G. PROCTOR.
Chairman, Wisconsin District Committee No. 7, N. B. S. A.

articles in recent issues, and giving especial emphasis to the article on cost accounting in the May 7 issue, Mr. Proctor called upon Mr. Olsen, who reviewed the history of the National Builders' Supply Association during its seventeen years of existence and dwelt particularly on the achievements in the last year in Indiana and of the past few weeks in Wisconsin. He spoke of the Government's attitude toward trade associations and the endorsement President Wilson has given the utterances of Edward N. Hurley in regard to the assistance of the Government in forming trade organizations.

J. G. Zimmerman of the Lehigh Portland Cement Co., spoke interestingly on the development of the cement industry and the cement manufacturers' attitude toward retailers and the questions which confront manufacturers in their endeavor to define a dealer. At the close of his remarks he was kept busy for a period of fifteen minutes answering questions, as a result of which the shadow of doubt which seemed to exist in the minds of a few of the retailers as to the sincerity of the manufacturers was entirely eliminated.

Field Secretary Gaines varied from his speeches of the previous week by confining his talk to the practical every day events in the life of a retail building material dealer. One of his statements was to the effect that he "didn't know of any other line of business where dealers as a class are not making money." He finished his talk by referring to the hopes and ambitions of President Allen of the National Builders' Supply Association in making the organization the strongest trade association in the country.

Those present at the meeting were:

O. T. Larson, Wisconsin Pipe & Fuel Co., Eau Claire, Wis.
E. F. Burns, Stanley Produce Co., Stanley, Wis.
B. G. Proctor, Wisconsin Pipe & Fuel Co., Eau Claire, Wis.
Haydon S. Gaines, National Builders' Supply Association, Chicago, Ill.
J. M. Botsford, Botsford Bros., Altoona, Wis.
J. G. Zimmerman, Lehigh Portland Cement Co., Chicago, Ill.
F. R. Proctor, Wisconsin Pipe & Fuel Co., Eau Claire, Wis.
R. H. Manz, Farmers' Co-operative Products Co., Eau Claire, Wis.
Knute H. Flakeöl, Meridian, Wis.
W. J. McGillivray, J. J. McGilvray, Black River Falls, Wis.
H. B. Coleman, Chippewa Falls, Wis.
A. H. Stevens, Eau Claire, Wis.
George A. Olsen, ROCK PRODUCTS AND BUILDING MATERIALS, Chicago, Ill.

The Madison Meeting.

For the purpose of organizing the retailers of the nine counties in the southwestern part of Wisconsin into a district association, a meeting of the retailers was held on Thursday, June 1, in the Park hotel, Madison, Wis. As soon as the retailers had partaken of a supper, Mr. Gaines took the floor and acted as chairman. Realizing that few of the dealers were acquainted with each other he introduced each one present to the others and then called upon F. H. Beswick of Madison to give his views of the National Builders' Supply Association plan. Mr. Beswick stated that he had investigated the work of the association in the Fox River Valley and said "If those dealers found the plan meritorious surely the same consensus of opinion should prevail in the Madison territory."

J. S. Cusick of Oregon, Wis., was called upon to give his opinion of a retail building material dealers' association and to state his experiences as an officer of the Illinois and Wisconsin Coal Dealers' Association. Mr. Cusick said, in part: "I am in hearty sympathy with the movement and I pledge my support. I have enjoyed my association with the Illinois and Wisconsin Coal Dealers' association, which was commenced in a small way, but which at the present time includes practically every retail coal dealer in Illinois and Wisconsin. I had the honor to be president of the association when government officials were investigating associations throughout the country. They took charge of our office in Chicago, including all of the books, documents and other property of the organization. The officers of the association at that time stood together and offered to co-operate with the government in the investigation. We asked the government for information as to how we could conduct our association in accordance with the law and in a short time they ceased to molest us. In this movement to organize a retail building material dealers' association we have the sympathy and support of the manufacturers who seem willing, by their interest, to make this thing a success. I think that every dealer in the district, as well as the state should come forward and become a member."

Mr. Olsen stated that he was present for the purpose of informing the dealers that their mouthpiece, ROCK PRODUCTS AND BUILDING MATERIALS, has given its hearty endorsement and full co-operation to the National Builders' Supply Association district plan of organization and spoke of the possibilities of creating harmony and competition of a healthy yet profitable nature through an association.

A. J. Whipple, sales manager of the Marquette Cement Manufacturing Co., said that in his experience in the cement business he has been led to believe that building material men are regular fellows. He compared the attitude of easterners and

(Continued on page 26.)

Del-Mar-Col Association in Quarterly Meeting

The usual interesting and beneficial regular quarterly meeting of the Del-Mar-Col Building Material Dealers' Association, was held at the Continental hotel, Washington, D. C., on Thursday, May 25, and was well attended by both active and associate members.

The meeting was called to order by President B. L. Grove, who submitted his report reviewing the work for the past quarter, in which he outlined certain new ideas through which to make the association of greater commercial value. A report by Secretary-Treasurer J. Grason Steffey, showed a substantial fund for the future work of the association. The committee appointed to report on the arrangement of a ten-cent cement differential, reported in favor of at least a ten-cent differential or more if such could be carried out. The association conducted a very lively discussion on the latter subject well into the lunch hour at one o'clock.

After the lunch, the association was addressed by John Poole, president of the Federal National Bank, of Washington, D. C., and P. T. Moran, president of the Chamber of Commerce, of Washington, whose subjects dealt largely with business and economic reforms in the building material industry and the great value of proper trade association of the kind that the building material dealers were conducting. The meeting lasted until late in the afternoon, and the manifestation of interest in the general discussion of the subjects before it, showed a real interest on the part of the members.

The seventh quarterly report of President Grove follows:

President's Quarterly Report.

Submitting this, my seventh quarterly report, it is with deep regret my inability during the past seven weeks, owing to serious trouble with my eyes, whereby I had practically lost the use of them, to give attention to association work. Many important matters in consequence have been neglected. I believe, though, this lack of attention on the part of your president will not in the slightest degree lessen one mite, the enthusiasm for our cause.

The vast benefits derived through the medium of our association are embedded and rooted so deeply within the minds of our membership that we shall long remain firm to its principles and teachings, which are ever for the betterment of the building material dealers' condition. These facts are known so well only in cities where thorough organization exists. My only regret is that our membership does not extend to every town within our territory where two or more dealers conduct a competitive business. Not having a thorough organization and a complete membership throughout our entire territory is my one great concern and cause for regret. I cannot help but feel that if one of our members in each section would take up the securing of membership in his particular locality and make this his individual business within a short time we would have a complete organization.

Since our last meeting your president has had the great pleasure of attending the annual meetings of the Eastern Pennsylvania and New Jersey associations. The former was held at the Walton Hotel, Philadelphia, presided over by its president, Mr. Erick. The meeting was enthusiastic and very largely attended, followed by a banquet. The New Jersey association held its meeting at the McAlpine Hotel, New York, being presided over by its president, Mr. Genung. It was the pleasure of your president at these gatherings to meet many of the prominent building material dealers of those states. Both Mr. Genung and Mr. Erick are "organization men" in its true meaning, workers who produce results. Their ability and judgment is evident by the progress they have made with their organizations and the success of the building material dealers in their sections.

The presidents of the eastern associations have not as yet held a conference this year. It is expected in a very short time a meeting will be called for the purpose of discussing some very important problems by this committee for presentation to our local organizations. We have same correspondence along these lines which will come before the meeting in the regular order of business.

We have had considerable correspondence with Mr. Allen, president of the National Builders' Supply Association, with which organization we are an affiliated body. Mr. Allen speaks very enthusiastic over the great work being done by the National in organizing building material dealers throughout the country, particularly through the middle West.

Referring to taking the state of Virginia in with our organization, we have had some correspondence with a number of dealers throughout that state. On account of the inability of your president to give the matter proper attention we have as yet to get results. We have made an effort to meet a number of the building supply dealers of the state at a meeting in Norfolk, but as yet satisfactory arrangements have not been made for this conference. We hope to accomplish something along these lines in the near future.

Things seem to be running very smooth and even in our locality. I am happy to say we have had few or no complaints filed since our Baltimore meeting, demonstrating very conclusively that conditions seemingly, especially throughout our territory, are satisfactory to the dealers therein.

It has been suggested to your president that we hold semi-annual meetings instead of quarterly. We feel it does create some hardship among our membership attending meetings frequently, yet we also believe these gatherings amply repay us for the time and expense. All of us can, without doubt, learn something of value and of interest no matter how frequently we may come together. This matter I wish brought up for your consideration and we shall be guided by your opinion as to the frequency of our future meetings.

We wish once again to call attention to unpaid dues. This is for those who have overlooked their payments. Our treasurer advises me as a general rule the dues are paid promptly. There are some, though, who neglect this part of the program. It is to those I now appeal. Your officers give a great amount of their time to the work of the organization without any recompense whatsoever; it is your duty to cooperate and assist them in every manner possible in the performance of this duty.

Sometime since we made an appeal to dealers to look after the profit end of the business rather than volume or tonnage, feeling that the unsettled condition existing throughout the country would create a hardship on us, getting prompt shipments of the material we handle and quick transportation facilities. This prediction, so far as my personal observation goes, is true. We, in this city, have had a good demand, but not at all satisfactory, for the very reason as above stated. Constant fluctuation of values, slowness in shipments, and congestion of transportation companies has made it almost impossible to have at all times a complete stock. I sincerely trust all have been guided accordingly and are able to show at least some slight remuneration for the extra harassing conditions in the conduct of our business.

Interesting Discussion on Cement Differential.

Following came the discussion of the important subject of the ten-cent cement differential, and the variety of views on this matter showed that the association would possibly have to give a little more time to the business practice before it could be put into practical operation. Mr. Kelly of Baltimore felt the matter of a cement differential should be given very thorough deliberation, and stated that the Baltimore dealers felt there should be no differential required, as they were of the opinion that all sales should be made through dealers. President Grove here injected the inquiry of all members, as to whether or not they were satisfied with the present five-cent differential on cement sales. The members seemed to be backward in giving their views on this subject, until President Grove stated that he proposed to treat the subject very frankly, and thereupon made the broad statement that he, as a Washington dealer, was not at all satisfied with the present practice of cement manufacturers selling the Washington territory on a five-cent per barrel differential. President Grove said that with the increase in the various expenses of the dealers, they could not do business and make any money on a five-cent differential. Mr. Kingsbury, of the Rosslyn Supply Co., of Washington, said that he felt that all Washington dealers would support the position taken by President Grove in this matter. Henry W. Classen, of the Maryland Lime and Cement Co., Baltimore, asked President Grove how the cement manufacturers felt about the ten-cent differential and stated that he felt that the president should call on the cement representatives to explain their position in this important trade matter. J. K. Barbour, of the Security Cement & Lime Co., referred to the situation in Washington, and stated that his company had not taken in over a year more than three contracts in the District of Columbia, except through the dealer. He was in favor of a ten-cent or fifteen-cent differential, if necessary. Walter G. Dutton, representing the Coplay Cement Manufacturing Co., stated that in his opinion the matter of the differential protection to dealers was largely in the hands of the latter, and that there had been a tendency on the part of some dealers not even to respect the five-cent differential. Mr. Dutton stated that he realized that it was unreasonable to expect the manufacturer to get the right support from a dealer in talking concrete construction with only a five-cent differential on a barrel of cement. Mr. Dutton further stated that the eastern manufacturers wanted the dealers to have the ten-cent differential, but that the dealers must first show the manufacturers that they will maintain the five-cent differential, adding: "The manufacturers have a right to sell any brand of cement to meet the market in their community, but if the dealer encourages cut-throat competition, he cannot expect the proper support from the manufacturer. It is up to the dealers to get the ten-cent differential in this section, which exists at this time in the eastern and western territories."

President Grove stated that he was not satisfied with the interest that apparently was being manifested in the discussion of this cement differential matter, and sought to work up an interest among the members by telling them that they should take this situation more seriously and endeavor further to give the proper cooperation to bring about a satisfactory settlement. This brought more responses, and Mr. Fuchs, of the Lehigh Portland Cement Co., spoke on the matter and pointed out that his company favored a ten-cent or a twenty-five cent differential in cases where dealers showed a disposition to stand together on even a five-cent differential. Mr. C. F. Behrens, representing the Suburban Lumber Co., of Baltimore, was opposed to any differential, as he felt that manufacturers should not make any prices and further felt that the dealers should look to the manufacturers to protect them in the prices that they (the dealer) saw fit to individually make. Mr. Behrens stated that in many cases where manufacturers sold cement direct, that they pocketed the five-cent differential and the dealer got nothing. He further stated that the cement manufacturers would come into a market and make a price through ignorance of conditions, and the whole market conditions of the community were completely demoralized. President Grove stated that he had observed in many cases it was a physical impossibility to get a manufacturer to stay out of a territory and let the dealer make the prices and handle the sales, and further pointed out that he doubted if it could ever be done. C. T. Kingsbury, of the Rossyln Supply Co., was of the opinion that a solution of the matter could be brought about by having the association endeavor to deal with the manufacturers and arrive at a satisfactory adjustment of this trade practice. Mr. Dutton again spoke on the subject, and gave an example of a dealers' association which requested manufacturers not to quote and said that he knew of one manufacturer who would not quote, but aimed to get representation through a dealer. He said there were twenty-five cement manufacturers in the eastern part of the United States, and in order to move their product, they had to sell direct. Mr. Dutton further said that if the trade practice of manufacturers selling altogether through dealers was adopted, it would mean only a few manufacturers would do any business, however he felt that the time was coming when manufacturers would discontinue largely the practice of selling the contractor direct.

President Grove, in summing up this differential situation, stated that he felt that the time was not ripe for asking the manufacturers to sell only through the dealers. If the dealers can get ten cents a barrel differential, he felt that would be doing very well. President Grove, in looking as he generally does for action in all matters, asked the dealers present if they favored asking the manufacturers for a ten-cent differential, but it was apparent that a decision could not be reached in the matter.

Vice-Chairman Kelly took the chair, Mr. Grove being called out. Harold M. Scott, of the Edison Portland Cement Co., addressed the gathering, stating that at a recent meeting of the cement association, it was felt that a request of the manufacturers to discontinue the sale of cement direct was largely a theoretical movement not at all practical in the conduct of general business. He called attention to the large sum of money being spent annually by the cement association, wherein he felt that certain activities on the part of cement manufacturers was quite necessary throughout the trade. He suggested, however, that a committee for the building material dealers' associations of the eastern section, should meet and get down to the facts relating to the ten-cent differential.

President Grove stated that he regarded the discussion of this subject of very great value to both dealers and manufacturers, and that he desired to know if it was the wishes of the members that a conference with the committee of manufacturers take place to go over this differential matter. President Grove further desired to know if it was the wishes of the association that this matter should be handled independently

or in conjunction with other building material dealers' associations. The Association agreed that it should be conducted in both ways. The president then stated that the matter would be given consideration during the early part of June, at a joint meeting of the several eastern organizations.

The next subject the president presented to the meeting was the request by President Allen of the National Builders' Supply Association for assistance in organizing the building material dealers. President Grove stated that he felt the Del-Mar-Col Association had received no assistance from the National association, and for that reason the local association has not met its assessment. President Grove felt that if the association did meet this assessment, that he felt the money should be expended in the territory covered by the local dealers' organization. It was agreed then by the association that such request should be made to the National body.

Work of "Rock Products" Indorsed.

President Grove then presented the important subject of the movement which had been inaugurated by ROCK PRODUCTS AND BUILDING MATERIALS to devote a part of its pages for the discussion of trade subjects of interest and value to the building material dealers, such subjects to be furnished by members of the associations. President Grove stated that he had already contributed one article, and that he was in further sympathy with this plan of ROCK PRODUCTS AND BUILDING MATERIALS to disseminate information of value to the building material trade. He felt that the exchange of ideas in this publication would lead to a greater development of confidence among competitors in the building material line, and aid materially in interesting dealers who are not giving the proper consideration to the value of the trade association brought about by the National Builders' Supply Association. President Grove stated that if any member of the Association would like to contribute to the educational work being conducted by this publication, he would be very glad to receive the articles from any member and forward them to the editors.

The next matter that came up was the question of extending the territory of the association so as to cover the Virginia dealers. President Grove stated that he had not been able to give the proper personal attention to the matter of developing organization in the state of Virginia, but felt that if he could visit several of the important cities of the state that he could work up a lively interest. In connection with this effort, the association was of the opinion that the National Builders' Supply Association should undertake this work in Virginia, and apply the funds contributed by the Del-Mar-Col association in meeting the expenses thereto. The meeting adjourned here for lunch, which was served in the grill room of the hotel.

Afternoon Session.

President Grove caled the afternoon session together, and introduced John Poole, president of the Federal National Bank, of Washington, who spoke particularly of the value of trade association and the duties of the seller in giving the purchaser that which is exactly represented by the dealer. Trade association for better business methods was most important in the opinion of Mr. Poole, and also the development of cost systems, better delivery service, labor-saving methods, and other improvements in general trade service were the duties that should be actively taken up by the associations of the various industries.

President Grove then introduced P. T. Moran, president of the Chamber of Commerce of Washington, as his very dear friend whom he had known from the time he had come to Washington. Mr. Moran welcomed the manufacturers and dealers, and told them very interesting stories of his career as a business man. He referred particularly to the condition that he had observed which prevailed years ago, when competitors looked upon each other as enemies and would not get together in proper trade association for the betterment of their condition. However, Mr. Moran stated that he had observed a change in this situation, and that now all lines of business were co-operating for economic improvement and were improving their services in many ways to the consumer.

After Mr. Moran had concluded, President Grove stated that he then desired to go into the general discussion of subjects of interest and value to the building material industry. Mr. Grove here called upon J. J. Gorman of the United States Gypsum Co., of Chicago, who gave a very interesting and helpful outline of the true value of trade association, and said that he felt the building material dealers' associations had much influence in outlining how the manufacturer should do business. He felt that the local dealers' organization was an asset to the manufacturers, and if they, therefore, kept together, there would undoubtedly result much better co-operation from the manufacturer. Mr. Gorman said that the importance of looking after credits and the various other services rendered to the manufacturer by the dealer, was surely appreciated by the manufacturer, and that the manufacturers, as a rule, wanted the dealer to understand that he was a part of the manufacturers' organization. President Grove called on several other representatives of the manufacturers present, who spoke along the same lines as expressed by Mr. Gorman.

Mr. Grove then called upon Henry M. Camp, of the Lime Service Bureau, Washington, who referred to the address of Vice-chairman Hurley before the Boston Commercial Club, giving his views on the value of trade association. Mr. Camp stated that in the conduct of his work for the lime industry, he was extremely pleased and greatly encouraged over the attitude of Mr. Hurley, in the belief that an industry should be not only encouraged, but lauded by the Government in the work of their various trade associations. Mr. Camp pointed out that the idea of Mr. Hurley as he viewed it, covered largely the work that was being done by the Del-Mar-Col association, and that the association should, therefore, continue to give a lively interest to the objects and purposes for which it was formed, by the regular attendance at meetings and the earnest discussion of the subjects presented. Mr. Camp also outlined the very healthy condition of the lime industry, which had been largely due to the disseminating of market and trade information through the operation of the "open price policy." He said that the association was engaged in an open-price-policy work in a way, through their collective discussion of their different trades.

After Mr. Camp concluded, President Grove requested the association to decide whether or not he should arrange for a discussion of the association's work, in conjunction with representatives from other associations, with the Federal Trade Commission, for the purpose of determining whether or not everything the association was doing in this general work, was wholly within the law. The association decided that this should be done, and authorized Mr. Grove to represent the organization.

President Grove then brought up the question which had been brought to his attention, of making the meetings of the association semi-annual instead of quarterly. It was very interesting to note the volume of protest from members to any such plan, all believing that the association was not meeting any too often now, in meeting only once every three months. There was so much value to come from the meetings, that rather than to make them less often, it might be better to hold them monthly.

General discussion for the good of the association followed, after which one of the best attended and most resultful meetings of the association adjourned.

The attendance was as follows:

W. P. Ward, Farmers and Planters Co., Salisbury, Md.
R. S. Teele, U. S. Gypsum Co., Washington, D. C.
J. J. Gorman, U. S. Gypsum Co, Chicago, Ill.
C. T. Kingsbury, Rosslyn Supply Co., Washington, D. C.
Thomas A. Robinson, Giant Portland Cement Co., Philadelphia, Pa.
W. A. Fuchs, Lehigh Portland Cement Co., Allentown, Pa.
A. E. Daley, J. B. King & Co., Philadelphia, Pa.
John J. Kelly, Jr., The National Building Supply Co., Baltimore, Md.
S. R. Cohill, Hancock, Md.
J. R. Baxter, Charles Warner Company, Wilmington, Del.
H. I. Rayner, Security Cement and Lime Co., Hagerstown, Md.
E. L. Becker, Tidewater Portland Cement Co., Baltimore, Md.
Charles G. Waples, Milton, Del.
C. H. Brigham, Atlas Portland Cement Co., Philadelphia, Pa.
C. A. Erwin, Keystone Plaster Co., Chester, Pa.
J. T. Wakeman, Samuel H. French & Co., Philadelphia, Pa.
J. Edwin Harris, Fornigle Architectual Stone Co., Baltimore, Md.
John K. Wetter, Atlas Portland Cement Co., Baltimore, Md.
Oscar L. Johnson, Rockville, Md.
C. A. Woolever, Saylors Portland Cement Co., Philadelphia, Pa.
L. L. Reeves, Sola Granite and Dredge Co., Washington, D. C.
Charles F. Miller, Chas. F. Miller & Co., Bethesda, Md.
H. R. Eastwood, Southern Building Supply Co., Washington, D. C.
S. D. Frazier, S. M. Frazier, Washington, D. C.
Henry W. Classen, Maryland Lime and Cement Co., Baltimore, Md.
Walter R. Fox, Dexter Portland Cement Co., Philadelphia, Pa.
Walter S. Dutton, Coplay Cement Mfg. Co., Philadelphia, Pa.
J. K. Barbour, Security Cement and Lime Co., Hagerstown, Md.
S. M. Frazier, Washington, D. C.
S. A. VerValem, Hudson Cement and Supply Co., Baltimore, Md.
L. W. Perry, Chevy Chase, Md.
Harry Gross, Saylors Portland Cement Co., Philadelphia, Pa.
C. F. Behrens, Suburban Lumber Co., Baltimore, Md.
J. G. Steffey, Steffey and Findlay Co., Hagerstown, Md.
S. Dana Lincoln, Washington, D. C.
Mr. Schildtnecht, Maryland Brick and Supply Co., Frederick, Md.
B. L. Grove, Grove Lime and Coal Co., Washington, D. C.
H. M. Scott, Edison Portland Cement Co., New York.
George H. Elliott, Edison Portland Cement Co., New York.
Gaston Daus, Edison Portland Cement Co., New York.
John Poole, President Federal National Bank, Washington, D. C.
B. T. Moran, President of the Washington Chamber of Commerce.
Henry M. Camp, ROCK PRODUCTS AND BUILDING MATERIALS, Washington, D. C.

CINCINNATI MARKET IN HEALTHY CONDITION.

Cincinnati, O., June 3.—The hope that building would be permitted to progress in Cincinnati this year unhampered by a strike, for the first time in several seasons, has already been disturbed several times by minor labor troubles, and on June 1 was completely dashed by a strike of common laborers, who ask for increased wages and an eight-hour day, with recognition of their union. About a thousand men are believed to have been out on the first day of the strike.

The general situation in the building and material field in Cincinnati is very satisfactory, aside from the labor trouble referred to. The larger jobs are progressing favorably, and deliveries of materials for them are being made actively. Other large jobs are coming into the market from time to time, and the amount of residence and other small work was never greater.

ARKANSAS ASSOCIATION OF LUMBER DEALERS.

The twelfth annual convention of the Arkansas Association of Lumber Dealers was held at Hotel Pines, Pine Bluff, Ark., May 26 and 27. The attendance was the largest in the history of the association. Addresses were made by L. R. Putman and J. R. Moorehead of the Southwestern Association, J. P. Powell of the University of Missouri, and F. L. Williamson, vice president of the Dewey Portland Cement Co. Mr. Williamson's paper on the subject of "Handling of Portland Cement by Retail Lumber Dealers," is printed on another page.

NEWS of the TRADE

TOMKINS ON GENERAL CONDITIONS.

New York, June 1.—"According to expectations the prices of several building materials have been advanced during the past month," is a statement by Tomkins Brothers of Newark, N. J. With one or two exceptions, in those materials which have not already advanced, the opinion is now being expressed that in common with steel products the peak of high prices for building materials has about been reached. On the other hand, no declines are expected for a long time to come.

Labor troubles have been the principal concern of both the manufacturers of building materials and operators on large construction work. The reason for this is to be seen in the high wages being paid by many of the factories which are making war munitions or other supplies to be shipped abroad. Workmen from all sorts of trades have been shortsightedly deserting their regular occupations to gain a temporary higher wage. This condition has affected the manufacture of lime, sewer pipe, Portland cement, metal goods, brick, and various other building materials, causing delays in shipments and a general demoralization of systematic work.

In addition to the labor shortage is the transportation difficulty, which is not much better than it has been for the past four months. Both the railroads and the manufacturers are urging shippers to buy in as large quantities as possible, and to load cars to full capacity.

In spite of the high prices for materials, speculative building is beginning to go ahead, after remaining almost at a standstill for many months. Evidently this class of builders do not expect prices to go lower soon, nor do they look for great advances over present prices.

In the Portland cement market there are two things of importance to the dealer—the liability of a stock shortage and a possible rise in price. The cement manufacturers in the Lehigh valley district are having the greatest difficulty in keeping enough men in their packing rooms to load the cars which are already on order. One day last month every packer walked out of one plant, and not a single car was loaded. In another plant half of the force left. The men are seeking the higher wages offered in the steel plants, and if the cement manufacturers are to maintain a full force, or even a part of one, they are compelled to pay higher wages. One mill reported only a few days ago that conditions were growing worse daily, and that to advance labor to a price which would compete with other industries in surrounding territory would cause an increase in the cost of manufacture of over five cents a barrel. Other mills in the district are having the same difficulty. For this reason every dealer in cement who does not want his stock to run out, should get his orders in as far ahead as possible. It will, without the least doubt, be to his interest to keep his warehouse well supplied.

Reports received from the Hudson river district are not at all favorable to a large brick production this year. Labor troubles have been the order of the day ever since the beginning of the season. The week of May 8 strictly No. 1 North river brick were quoted, in large lots, New York City, at $7.75 per thousand, with Raritans or Jersey brick at $8.00@$8.25 per thousand. The following week's quotations showed prices reversed, with North rivers selling at $8.50 per thousand. It is quite evident that unsettled prices will be the rule for some time to come.

Almost without exception the hydrated lime manufacturers are reporting great difficulty in keeping enough men at the plants to run full during the day, and that any overtime work is out of the question. Considerable delays are reported in filling orders, which should be placed well in advance of actual requirements to avoid disappointment. Regarding the recent advances, the manufacturers give assurance that higher prices were positively necessary on account of the greatly increased cost of labor, explosives, and containers. Both jute and paper bags are hard to obtain at greatly increased prices, the advance on paper bags alone being equal to 55 and 60 cents per ton of hydrate.

The sewer pipe manufacturers report a fair volume of business, but orders are not so plentiful as to overtax shipping facilities.

One of the most interesting features of Newark's two hundred and fiftieth anniversary celebration this summer is the industrial exhibit which opened May 13 to run until June 3. Visitors in the city before the latter date should not fail to visit the Armory, where it is being held. This exhibit tells in a graphic manner the important position of Newark as an industrial center. It calls to mind the fact that, while other cities are noted for one or two particular products, Newark has nearly 400 distinct lines of industry, and sends its goods all over the world.

CONDITIONS IN PITTSBURGH IRREGULAR.

Pittsburgh, Pa., June 3.—Miller & Coulson are so rushed with orders that they are trying to buy the output of several plants in order to satisfy their customers for building blocks and fireproofing. Their plants at Reynoldsville, Pa., and at Salineville, Ohio, are both very busy. At the latter place they have recently put in a gas producing system. The chief complaint of this company is the shortage of labor and the poor quality of the supply which is available. Good labor is bringing $2.25 per day and regular workmen cannot be secured.

The D. J. Kennedy Co., from its East End yard, reports a little slump in business in the city during the past two weeks. This is laid to high prices, especially. A considerable amount of building is being held up on account of the abnormally high bids and the company does not look for any brisk developments this summer on that account.

John A. Strouss, of Knox, Pa., Strouss & Bragdon, says that prices for lime, cement, clay, tile, brick and other material are no higher than they were four or five years ago. Brick are only up about fifty to eighty cents per 1,000 and lime only a few cents a barrel. Mr. Strouss believes that by the end of the year the volume and value of the new structures erected will compare very favorably with any year since 1913.

The building of warehouses continues to constitute one of the chief features of the situation in Pittsburgh. On the south side, in addition to the Houston Brothers' warehouse, the Pittsburgh & Lake Erie Railroad Co., has started work on a $100,000 warehouse near Smithfield street. F. F. Nicola and others are clearing a site for a very large warehouse on Duquesne way near Seventh street. In the east end the Pennsylvania Railroad is arranging to build a $50,000 warehouse and freight station.

MILWAUKEE BUILDING BRISK.

Milwaukee, Wis., June 5.—The condition of the building trade in this city is a rather healthy one, judging from the large amount of building going on in all parts of the city. Reports from the state indicate that the same condition exists there and building supply houses are correspondingly active. The building record for Milwaukee to date is still far in excess of last year. During the month of May the building inspector issued 565 permits, representing an investment of $1,017,718, which is practically the same as a year ago.

One of the serious factors in the situation is that of labor shortage. In pace with the prosperity wave which this territory has been enjoying comes the dissatisfaction of laborers. While the building trades in general have not suffered from strikes, labor can practically control the wages as the men will leave one job for another paying a little more. Then, too, factories and every kind of employment that demands men and common laborers at this time are paying good wages. As far as the better class of labor is concerned, such as has its trade, conditions are satisfactory.

KANSAS CITY IN THROES OF STRIKE.

Kansas City, June 5.—The outstanding feature of the past two weeks in Kansas City has been the strike of nearly one thousand laborers, precipitated on June 1. The point at issue has been an increase of five cents per hour over the present scale of thirty-five cents per hour. Some of the most prominent buildings in the city are tied up, either wholly or in part, including the Overland building, the Firestone building, the German hospital, the St. Joseph hospital and several office buildings.

The first trouble came at the Overland building, where the Leonard Construction Co. of Chicago refused the advance. From there the strike spread to the other buildings. The danger now is that 25,000 men affiliated as the Building Trades Council will not go to work. The council has notified the builders' association that their demands must be met, and the association stands firm in its refusal to relent. This wage increase was asked for last year and refused. Efforts are being made to arbitrate.

BETTER CONDITIONS IN EASTERN CANADA.

Toronto, June 2.—There was an increase in the value of building permits issued by the Toronto city architect for May as compared with May last year. During the month there were 535 applications for permits and 532 erections, the value of the latter being $988,985, while during May, last year, the applications for permits were 586, and the erections 665, the value of the latter being $807,869. The increase for the month of May this year was approximately $180,000. The figures for the first five months this year are $2,110,420, as compared with $2,377,459 last year.

From applications for permits which have been made, it looks as if June will show a considerable increase in the value of permits.

A plan is on foot at Windsor, Ont., to erect one thousand dwelling houses in the southern part of the city, wherein to accommodate some of the hundreds of families now unable to secure houses in Detroit.

CHICAGO BUILDING BREAKS RECORD.

The report of the Chicago building department shows the largest amount of building operations for May ever recorded in this city. There were 1,207 permits issued, with an estimated valuation of $13,707,100, an increase of 73.45 per cent over the same month last year. For the five months of the year there has been an increase of sixty-seven per cent, a surprising showing in view of the fact that the totals for 1915 were, with one exception, the largest in the history of the city. If the present wave of building keeps up, as it gives every indication of doing, the record of $105,000,000, spent in building in 1911, will be greatly exceeded.

A new ten-story hotel, costing $550,000, is being erected on the northwest corner of Lincoln Park West and Garfield avenue. The new hotel will contain 225 guest rooms, each with a private bath. Provisions have been made for a large ballroom and banquet hall.

The building being erected by Winston & Co., at 360-62 East Grand avenue for the Lammers Shilling Co., and which was designed by Paul Gerhardt, embodies a radical departure from the usual style of construction for printing buildings. It will be seven stories and basement, all of reinforced concrete and entirely fireproof. There will be no dark places in the building, as about 85 per cent of the wall space will be glass. It will be of the sprinkled type, with freight and passenger elevators, a vacuum system of steam heating, and highly developed electric light and power system. Its cost is placed at about $150,000.

LINCOLN TIED UP BY STRIKE.

Lincoln, Neb., June 3.—A strike on the part of the common laborers in the building line has affected all the building trades of Lincoln and as a result all building activities are tied up. The common laborers want thirty cents per hour and the mortar mixers are asking thirty-five cents. The associated trades have joined hands with the strikers and are asking that their demands be granted. The laborers went on strike on Monday, May 26, and it is expected that before long the allied trades council, which includes bricklayers, steel workers, carpenters and others will go out on a sympathetic strike.

According to J. H. Allen, general manager of the Nebraska Material Co. and president of the National Builders' Supply Association, Lincoln is experiencing something it has never seen before, namely, organized labor marching up and down the streets carrying banners, stating that certain jobs are unfair. In his humorous manner, Mr. Allen explains conditions in Lincoln as follows:

"This is the first time in the history of Lincoln that there has been anything of the kind pulled off. We are getting to be a real metropolitan city. We feel real proud of it. Our yard looks like a cemetery, with cement blocks for tombstones. Nothing doing. I went to the ball game today. There is no one who can appreciate one of these strikes until they really get mixed up in one. It is difficult to say when the present state of affairs is going to end."

LOUISVILLE DEALERS AFTER BIG JOBS.

Louisville, Ky., June 5.—Louisville building supply dealers are keen and alert just now in an effort to land some of the juicy pickings which are almost in reach.

Building permits for May showed a nice increase in dollars and cents although the number of permits was slightly smaller than during the corresponding month of last year. In May, 1915, a total of 226 permits were issued for buildings to cost $328,090 as compared with May, 1916, with 220 permits issued for buildings to cost approximately $333,230. Nearly every month of the fiscal year, starting last September, has shown an increase over the corresponding months of the previous year.

BOSTON ACTIVITY SLOWS UP.

Boston, Mass., June 3.—Three hundred and six building projects received permits in metropolitan Boston during the past two weeks, the valuation, according to the F. W. Dodge Co., being $2,626,000. A period of halting was developed recently in the building materials trade, which is to be regarded as largely out of line with the real conditions in building. Practically all troubles with railroad embargoes are at an end. Now that every chance is offered to get everything necessary, the demand slacks and some very promising projects seem to go dead entirely.

Some of the material men estimate that in the anxious times of the embargo many filled up in desperation by every hook and crook possible. While some regard the present quietness as a slump of considerable proportions, some large jobbing firms report a fairly steady trade, and business up to the first of the month equal to the same time last year.

The Massachusetts highway commission bought 4,000 barrels of Edison Portland cement last week through the Eastern Clay Goods Co. The cement is to be delivered at West Pittsfield for the concrete state road to be constructed in the western part of the state.

The building trade is trying to untangle a kink in the labor situation. The Building Laborers' Union in Boston went on strike June 1, the contractors having refused a raise in wages on that date.

CENTRAL WEST TOWNS BUSY.

Business continues on the boom in the central west. Many cities are reporting unprecedented activity. Tulsa, Okla., is breaking national records in building, bank clearings, postoffice receipts, and oil production, for towns of its size. The last week in April saw permits issued for buildings costing approximately $175,000, only one of which was a business building costing $30,000.

BUSINESS IMPROVES IN WESTERN CANADA.

Winnipeg, Man., June 1.—Weather conditions have vastly improved in the last few weeks and business in the building supply business in the prairie provinces has picked up as a result of the opening of the roads to the cities. Seeding operations have delayed many farmers from ordering their building material, according to Manitoba and Alberta retailers, but in Saskatchewan a brisk demand is recorded. An item of interest to the builders' supply men is the fact that the building permits for every town in western Canada for the month of May has shown an increase over a corresponding period last year.

WISCONSIN RETAILERS HOLD ENTHUSIASTIC MEETINGS.

(Continued from page 18.)

westerners with regard to their business and to each other. "There is no one any nearer to the cement manufacturer than the building material dealer," said Mr. Whipple. "He handles his materials and he is coming nearer and nearer every day—and the manufacturers want it so." Mr. Whipple dwelt upon the necessity of conducting business in an honorable and upright manner with respect for others in the same line of business.

L. F. Desmond, secretary of the National Builders' Supply Association, explained the district plan of organization as adopted by the association, defining the three principal features embodied in the district, state and national bodies. He referred to farmers' co-operative bureaus which exist in Indiana and other states and which are bound to grow unless legitimate dealers place themselves in a position to intelligently resist such advances. He stated the purpose of the association was to give the dealer who had a legitimate grievance an opportunity to refer that grievance to a central source and through a national association have it corrected. "Individually you can do little," said Mr. Desmond, "but through an association of thousands of other dealers you have a channel for correcting these abuses." He finished his talk by quoting from an address on trade associations given by Mr. Hurley before an Illinois association.

Field Secretary Gaines referred to the fact that no matter how long a man may be in business there is always an opportunity to learn something from mingling with his fellow dealers. James E. Conklin, of Madison, who has been retailing building materials for sixty-two years, agreed with him most heartily on this point. After a few remarks relative to the possibilities of an association Mr. Gaines again demonstrated his ability as an organizer by securing the applications of every dealer present for membership in the association. The firms are:

Fennimore Lbr. Co., Fennimore.
Waterman & Son, South Madison.
Castle & Doyle, Madison.
Fifield Lumber Co., Janesville.
A. P. & H. S. Lovejoy, Janesville.
Brittingham & Hixon Lbr. Co., Janesville.
Schaller & Young Lbr. Co., Edgerton.
Cusick, Richards & Roberts, Oregon.
Middleton Lbr. Co., Middleton.
Drives & Struck, Madison.
C. F. Cooley, Madison.
Conklin & Sons Co., Madison.
Wm. H. Angell & Son, Sun Prairie.

The district was then organized as District Committee No. 9 of the Wisconsin Division and the election of officers followed. C. F. Cooley, of Madison, was elected chairman and, although he stated his belief that young men should be made officers of the association, yet he accepted the office and said, "I believe this is a good move and should be endorsed by all of the dealers in the district."

Leo H. Atwood of Janesville, was elected secretary. Upon his election he said, "It was with the attitude of wanting to do that which is right that I came to this meeting. With that same attitude I will accept the nomination and try to carry out the work attached to the office."

Fred W. Ducat, representing W. H. Pipkorn Co., Milwaukee, stated that Mr. Pipkorn, as a director of the association, was willing and eager to help the dealers of the district solve the various problems which are bound to confront them at times and with Mr. Pipkorn's consent pledged the hearty co-operation of all of the directors of the National Builders' Supply Association.

Those in attendance were as follows:

Leo H. Atwood, Fifield Lumber Co., Janesville, Wis.
Peter Olsen, Blanchardville Lumber Co., Blanchardville, Wis.
Henry S. Lovejoy, A. P. & H. S. Lovejoy, Janesville, Wis.
L. E. Utter, Middleton Lumber Co., Middleton, Wis.
A. E. Utter, Middleton Lumber Co., Middleton, Wis.
C. M. Larson, Heddles Lumber Co., Stoughton, Wis.
L. W. Hutsen, Heddles Lumber Co., Edgerton, Wis.
A. E. Skinner, Brittingham & Hixon Lumber Co., Madison, Wis.
F. A. Young, Schaller-Young Lumber Co., Edgerton, Wis.
C. F. Cooley, Madison, Wis.
J. S. Cusick, Cusick, Richards and Roberts, Oregon, Wis.
James E. Conklin, Conklin & Sons Co., Madison, Wis.
Albert Ketterer, Fennimore Lumber Co., Fennimore, Wis.
N. J. Struck, Drives & Struck, Madison, Wis.
H. G. Waterman, Waterman & Son, South Madison, Wis.
F. H. Beswick, Conklin & Sons Co., Madison, Wis.
William H. Angell, Jr., William H. Angell & Son, Sun Prairie, Wis.
George A. Olsen, ROCK PRODUCTS AND BUILDING MATERIALS, Chicago, Ill.
A. J. Whipple, Marquette Cement Manufacturing Co., Chicago.
J. G. Zimmerman, Lehigh Portland Cement Co., Chicago.
F. W. Ducat, William H. Pipkorn Co., Milwaukee, Wis.
John E. Doyle, Castle & Doyle, Madison, Wis.
W. H. Smeaton, Marquette Cement Manufacturing Co., Chicago.
T. W. Conklin, Conklin & Sons Co., Madison, Wis.
L. E. Garmo, Universal Portland Cement Co., Chicago.
Haydon S. Gaines, National Builders' Supply Association, Chicago.
L. F. Desmond, National Builders' Supply Association, Chicago.

Members received in the Indiana division of the National Builders' Supply Association since May 22 are as follows:

Dayton Grain & Lbr. Co., Dayton.
Bourbon Lbr. & Coal Co., Bourbon.

CONCRETE

Too Much Water.

More than half of the concrete work now being done by contractors who have learned their trade by working for a short period on two or three jobs under the direction of a capable engineer, and afterwards applying the hints and suggestions so picked up by the rule of thumb is always prone to put too much water into the concrete mass.

When mixing is done by hand it is usual for the small contractor to provide a flat board or floor about ten feet square upon which his batches are made. The materials are measured by wheelbarrow loads, usually three of crushed rock, two of sand and a bag of cement, and for richer mixtures a bag and a half of cement is used. Four men with shovels turn the mass over completely a couple of times while all the materials are dry, and then the water is added by dipping pails from a barrel or through a garden hose, if such a convenient supply of water is at hand. The laborers then are supposed to give the wet material three complete turns before it is considered to be properly mixed. Now it just happens that as the water goes into the mass the shoveling process becomes heavier and heavier. It clings together, sticks to the board, balls up into chunks and only becomes an easier process as more water is added. When mixing is done by this process there is no distinct and settled measure for the water that goes into the mass. The contractor merely wants it as completely mixed as he can possibly get it, and the men with the shovels want that process to be just as easy as possible. The dry materials continues to take up water and to retain it for a period after it has accumulated all of the water that it can possibly retain in the mechanical and chemical processes that take place in the hardening of the resultant concrete. As a consequence of this procedure from 10 to 15 per cent of excess water is taken up by the concrete mass, which within a very short time becomes evident. Where the material is placed after mixing, the excess water is excluded and rises to the top of the mass. It is much better that this excess water should never be put into the concrete at all, for water is practically incompressible and the squeeze required for its exclusion causes weak veins in the concrete, which tend to make it spongy. It is probable that this excess of water is one of the causes, at least, of the crazing of some slabs and floors.

When a mixer is used the procedure is to charge the drum of the machine with a given volume of aggregates and cement and then give the drum from three to five turns so as to mix the dry materials, and then add a measured amount of water—the water being put into the drum just as promptly as can be done, while it is spinning. As soon as the water strikes the mass a very pronounced increase of power is required to drive the drum, which gets less and less as the mixing process becomes more complete. Right at this point the time element becomes an important factor in the mixing, for there is always a tendency to increase the amount of water to shorten the length of time to secure the mix. With 10 or 15 per cent decrease of the water and twice as much time devoted to the mixing, what seems to be about the same result will be obtained, but a very great difference in the material and the resultant concrete can easily be observed. These proportions are not intended to be exact, because they vary with different types of material, but this is mentioned to draw attention to the fact that there is no good substitute for the time element in securing a good mixure, and the apparently simple method of giving it a little too much water is the very worst thing that could be resorted to in whooping up the speed of the work.

For several years there has been a great deal of concrete laid by the use of towers, having gravity chutes to convey concrete from the mixer to the various parts of large jobs. The process has seemed to meet with very surprising success to those who know that when concrete is mixed so as to be somewhere in the neighborhood of its maximum in the values for which it is made, that there is a pronounced tendency when chuting it through a trough for the larger pieces of aggregate to separate from the mass and roll down ahead of the smaller particles, after this the stiffer mortar, and last of all wet slush. Observation shows that the wetter the mass up to a certain point, the faster this separation will occur, and yet when it comes from the mixer just about right it will not flow with anything like the promptitude necessary to clear the chutes. It is apparent that if a large proportion of the heavier pieces of the mass did separate and rattle down the chute ahead of the bulk of the batch, that the forms would not be filled with the same kind of a mixture that was produced at the mixer, but a regrading of the concrete mass would occur.

Having seen a great deal of work that has been sent through the chutes, which to observation appears to be all right, and this being backed by the assurance of tests made upon such structures, one is tempted to withdraw all objection to the use of chutes. Yet the principles cited are always present and consequently it is to be doubted if such a method is really good practice, and will always give the good results which the present wide adoption of the use of chutes for placing concrete seems to promise.

It is certain that too much care or too much attention can never be expended upon securing the perfect mixture of the materials that go to make up the concrete mass, nor for getting them uniformly and properly placed. These are the main points of good concrete work.

ELECT CEMENT SHOW OFFICIALS.

At the annual meeting of the Cement Products Exhibition Co., held May 23, the following officers were elected:

B. F. Affleck, president.
A. Y. Gowen, vice-president.
Blaine S. Smith, secretary.
J. U. C. McDaniel, treasurer.

Directors of the exhibition company were as follows:

B. F. Affleck, Universal Portland Cement Co.
A. Y. Gowen, Lehigh Portland Cement Co.
J. U. C. McDaniel, Chicago Portland Cement Co.
Blaine S. Smith, Universal Portland Cement Co.
W. E. Cobean, Wolverine Portland Cement Co.
Wm. Dickinson, Marquette Cement Manufacturing Co.
D. McCool, Newaygo Portland Cement Co.
Robt. F. Hall, Portland Cement Association.
Arthur Cameron, Municipal Engineering & Contracting Co.

TO EXPERIMENT WITH CEMENT TIES.

The Public Belt Railroad Commission has applied to the New Orleans commission council for authority to make an experiment with concrete cross ties. It is proposed to purchase an allotment of 3,200 7x9—9 ties for one mile of track. A price of 70 cents per tie has been made.

ORGANIZE SOUTHWESTERN CONCRETE ASSOCIATION.

At a meeting at the Coates House, Kansas City, Mo., on May 26, a group representing various concrete interests perfected the organization of the Southwestern Concrete Association. Representatives from cement manufacturers, contractors, engineers, concrete machinery manufacturers and reinforcement companies were in attendance. Officials and directors were elected as follows: Garnett B. Appo, president; Martin Carroll and W. F. Fague, vice-presidents; H. H. Peters, secretary; C. A. Stevenson, treasurer; and F. L. Williamson, Godfrey Swenson, C. B. McVay, J. B. Marcellus, H. C. Koch, John A. Conover, William Bunting, William H. Stripe, Victor L. Phillips, W. A. Collings, George H. Seidhoff, Louis Baum, directors.

The main object of the organization is to promote the use of concrete throughout the Southwest. The states to be included are Missouri, Kansas, Arkansas and Oklahoma. Membership will be divided into two classes; users of cement, and sellers of products entering into the making of concrete. This association, with somewhat the same ideas in mind as the Mid-West Cement Users' Association of Nebraska and Iowa, should suggest the advisability of work along similar lines throughout the country. There is no doubt that if every section of the country had such an association to see that concrete gets a square deal it would mean much to the cement and allied industries.

While a cement show is not being thought of for the immediate future, such a show is of course a possibility. At the present time the idea is to have an annual convention with an educational program and to establish bureaus for the dissemination of accurate knowledge.

The City Council of Vallejo, Cal., has adopted a resolution of intention to lay a large amount of concrete sidewalks.

Operations have been started at the new factory of Claude Mason, at Rice Lake, Wis., which is manufacturing the Caldwell interlocking concrete staves for the Twentieth Century Silo Co., of Milwaukee. A frame building, 40 by 84 feet in size, houses the big concrete mixer which is electrically driven. A carrier runs from the overhend tracks to the moulds, while three ground tracks carry the completed staves and doors to the storeroom.

Concrete will feature in the new buildings which are about to be erected on the big farm of Fred Pabst, of the large Pabst Brewery interests of Milwaukee, which is located at Oconomowoc, Wis. Plans call for a reinforced concrete grain elevator, 36 by 36 and 70 feet high. The dairy buildings, wagon and machine sheds and calf stable will have concrete foundations and floors, and the walls and roofs will be principally fireproof building material.

The county commissioners of Mt. Gilead, O., have decided to build the Mt. Gilead-Mt. Vernon road of reinforced concrete. Contracts were let recently at Columbus on an alternative basis, leaving the selection of the material to the commissioners, and on the decision to use concrete the work will be done by the Grohne Contracting Co., of Joliet, Ill., on its bid of $97,293.

Rice Concrete Co., Monon, Ind., capital $50,000; to manufacture cement and cement products; directors, Martin L. Rice, Isaac N. Cash and William E. Brucker.

The Charleston Cement Products Corporation, $5,000; the officers are: P. L. Bissell, president and treasurer; T. Wilbur Thornhill, vice-president, and W. C. Wilbur, secretary and treasurer.

The Wilson Concrete Co. of Red Oak Ia., says this year will be its largest as to volume of business. The firm manufactures drain pipe and tile.

CEMENT

The Role of the Chemist in the Cement Industry*

BY C. N. WILEY, BIRMINGHAM, ALA.

Much mystery attended the processes employed in the early manufacture of Portland cement. When the brick layer of Leeds discovered that he could make an artificial water cement from a mixture of Thames chalk and Medway mud, he took every precaution to insure that none should discover the secret of his process. When engaged in making his raw mixture, it is said that he attired himself in flowing black gown and the pointed hat of the mystic and performed curious incantations over his operations. I. C. Johnson in 1845 wrote: "Thus he had a kind of tray with several compartments and in these he had powdered sulfate of copper, powdered limestone and several other matters. When a layer of washed and dried slurry and the coke had been put into the kiln, he would go in and scatter some handfuls of these powders from time to time as the loading proceeded, so the whole thing was surrounded by mystery."

One can imagine with what intense interest Mr. Johnson observed this remarkable procedure and it is small wonder that he was fired with a stronger determination to know of what the composition of this cement consisted. Procuring a sample, he had one of the most prominent chemists of England make an analysis and the chemist's report that the substance contained ninety per cent phosphate of lime mystified Johnson still further. But thinking that at last he had won the secret of this hydraulic compound, he made a large collection of bones from the butchers of the city and proceeded to calcine them. Needless to say, he was induced to discontinue his operations by the outraged citizens of the vicinity.

So up to this time, the chemist proved rather an obstruction than a help to the solution of the cement problem. But by the world-old method of trial and error, Johnson at last succeeded in making a cement which was equal in every respect to that of Aspdin and from this on the industry began to expand and thrive.

In the early days of the Portland cement industry, the correct adjustment of the proportion of carbonate of lime to clay was purely an empirical process. In the first place, mixtures were made in varying proportions from which samples of cement were prepared and the proportion giving the best cement was adopted. Any irregularity due to variations in the chemical composition of the materials, or carelessness on the part of the workmen, was ascertained by sampling the mixture frequently, the samples being burned in a trial kiln. From a close observation of the resulting cement, when tested for soundness, color, etc., the "sampler" was, by long experience, enabled to judge whether the correct proportions were being maintained. This was a tedious and an unsatisfactory process, for while a sample was being prepared and tested, the bulk it represented had passed beyond the reach of alteration. If the slurry was run into backs, any error was corrected by altering the mixture and luting or stirring the contents of the back, from which a sample was occasionally prepared. With the Goreham process, no alteration of the previously prepared mixture was possible; it would probably be dry and ready for the kiln before the results of the sample were known. If the contents of any particular drying-flat or chamber proved to be over- or under-clayed, the burner could be instructed to burn it lightly or heavily as the case might be and this was really all that could be done.

When it is remembered that if the materials were in the first place suitable, success depended on the proper proportion of the carbonate of lime to clay and that for the same material this proportion was a constant one, it is evident that, if the carbonate of lime in a normal sample was known, the correctness of the mixture could be checked by the determination of this substance in the trial sample. And it was upon this determination that chemists depended largely for the proper composition of their mixtures.

An instrument known as Scheibler's calcimeter, originally devised by Dr. Scheibler for determining the amount of carbonate of lime present in animal charcoal used in sugar refining, was frequently employed for determining carbonate of lime in Portland cement mixtures. The principle of its action is well known to chemists and it was the principal instrument of mixture control in the cement industry up to ten years ago. The results obtained through it, although "near enough" for many technical purposes, were far from accurate. The carbonic oxide evolved is collected over water in which it is to some extent soluble and a correction has to be made dependent, of course, upon the volume of gas evolved. The Lunge nitrometer, in which the gas is collected over mercury, was also commonly used. Very little knowledge of chemistry or chemical manipulation was necessary for the use of the calcimeter or nitrometer.

Thus in the early days, the chemist was hardly known in the cement industry and it was unthought of for a cement manufacturer to employ the exclusive services of a professional chemist. The employee responsible for the maintenance of a correct and uniform mixture of raw materials was but a workman of more than the ordinary intelligence whose success depended on the rapidity with which he could make his test burnings and the degrees of memory he possessed in profiting by past experiences.

Redgrave remarks in his book on calcareous cements that "the sample kiln should not be ignored when working with new and untried materials and much may be learned from the methods of the old-time sampler, his methods of work and the unconscious instinctive way in which he reasoned from the appearance of his samples. It should not be forgotten that Portland cement was discovered by a bricklayer and that its reputation was established long before the process of manufacture became a scientific question."

In this country, the early manufacture of Portland cement was chiefly confined to the Lehigh Valley region, through which ran a belt of argillaceous limestone, the composition of which was almost in the exact proportions for making a high-grade cement equal in every respect to the more complicated mixtures of European manufacturers. The process of trial and error was largely responsible for the early success of men like D. O. Saylor and it was not until somewhat later that the chemist was first called into consultation and his advice was asked more for the purpose of locating the new deposits of suitable rock and in the working out of problems which arose in the operation of the manufacturing process.

John W. Eckert may be called the father of cement chemists in this country. At the time Saylor and his associates were perfecting their processes above Allentown, Eckert was working as an assistant to Professor W. H. Chandler at Lehigh College, now University, South Bethlehem, Pa. He was asked to make analyses of rock from the different beds in the quarries of the Coplay Cement Works, of which D. O. Saylor was president. Cement was then made from each of these distinctive rocks and these cements were analyzed. In this way it was determined which beds were suitable for Portland cement and the other beds could be used in the manufacture of their Anchor brand natural cement. In his report of 1875-6, the state geologist, commenting on this, says that "much technical and scientific supervision is necessary to determine which stone to use and which to reject in order to make a cement capable of undergoing the tests now applied by engineers and architects." So it might be said that the activity of the chemist in the cement industry depended greatly on the increasing severity of the specifications laid down by engineers and architects.

Eckert was finally engaged by the Coplay Cement Works to devote his entire time and knowledge to the process of manufacture and he thus became the first cement chemist in this country. His efforts resulted in more certainty and less chance in the preparation of proper mixtures and a more uniform product naturally resulted.

Somewhat later, Robert W. Lesley, of the pioneer manufacturers, was experimenting with the bricks into which the slurry was pressed preparatory to burning and he solicited the coöperation of George W. de Smet, then a government chemist engaged in the study of asphalts and kindred materials. Together these two men worked out various problems and were the first to mix the slurry with hydrocarbons before casting into bricks. The incorporation of this hydrocarbon not only made an excellent binder, but in the kiln the burning out of this binder rendered the brick more or less porous, so that the mass could be more evenly burned.

Lesley and DeSmet also discovered the difference between crystalline and gelatinous silica and Lesley took out a patent for the manufacture of gelatinous silica, which they thought was of great importance.

All cements in those days were quick-setting and many efforts were made to retard this setting for obvious reasons. When P. I. Giron, affectionately called "Pig Iron" by his men, a French chemist in the employ of the Atlas Cement Co., was in France he had noticed the workmen adding a white substance to cement before they applied same in building sidewalks. As gypsum was in common use in France in building operations, he suspected that this was the white material and he found that by adding a small amount of this substance to the cement the setting time would be materially lengthened. Dyckerhoff in Germany was also making use of plaster to season his cement and he obtained a slower setting cement. Lesley took out a patent for seasoning cement, the principle of which was to sprinkle the clinker with sulfuric acid.

The question as to what Portland cement really is early received much attention from investigators. Chemical investigations, so far, have failed more

* Address presented before the Alabama Section of the American Chemical Society, December, 1915.

or less completely to throw light on the complex structure of this substance, although mineralogical examinations have been more successful. Although chemical methods have failed to reveal the actual structure of Portland cement, much has been learned by the study of synthetic compounds. Probably Vicat was the pioneer in this line of research, followed by Rivot, Chatoney and Fremy.

In Germany, Heldt, Fuchs, Schott, Michaelis, Erdmenger, Dyckerhoff, Meyer and others were attacking the problem along this line. Up to 1885 the various theories advanced defined more or less definitely the chemical composition of the cement, but all believed that upon addition of water the cement broke down into simpler compounds and free calcium hydrate. Believing that if this free lime could be removed from the anhydrous cement much more could be learned of the actual composition, investigators sought reagents by which this extraction could be accomplished. Rebuffat was the first to make use of an aqueous sugar solution, but Michaelis and Feret objected that results obtained in this way must be incorrect.

Probably the most satisfactory test which we have for free lime is that devised by Professor A. D. White. The method is based on the formation on the slide of a microscope of a characteristic crystalline calcium phenolate readily recognizable in polarized light. The reagent is prepared by dissolving crystallized phenol in an immiscible and rather non-volatile solvent, such as nitrobenzol, and adding a trace of water. Thus it is possible, by this test, to determine whether the chemical balance between the calcium and the other constituents in a good cement has been attained.

As mentioned above, much has been learned of the constitution of cement through mineralogical investigations. As these investigations were conducted in many cases by chemists, it is only proper to grant the chemist credit for his part in solving the problem. LeChatelier was one of the first to attack the problem along these lines and he was followed by many investigators. In this country the work was being carried on by such chemists as Richardson, the Newberrys, Campbell and others, and much was learned from their experiments. Several years ago, Day and Sheperd and scientists of the Geophysical Laboratory have from extensive investigations come to a conclusion as to the true constitution of Portland cement and they are now engaged on studies of hydration.

The technical chemist has not had the time to devote nor the opportunity to pursue investigations like the above, but he has contributed to the knowledge of the subject in no small degree by working out technical processes whereby a high-grade product may be made and maintained. He has found that the cement rocks of the Lehigh Valley are not necessary for the production of a high-grade product, but has gone into almost every state of our Union and has found there materials which when properly combined would produce a Portland cement of high quality. On account of the variation in composition of these raw materials he has developed methods for their proper control. The increasing severity of cement specifications has caused a greater watchfulness throughout the process of manufacture until at the present day the chemist has in control every step of the process from the time the rock is won from the deposit until the finished cement is placed in the hands of the ultimate user. And he has gone yet further, for he has shown the user how this cement may be used to best advantage and has pointed out the necessity for closer inspection of the materials with which it is combined.

The chemist has shown that a true Portland cement can be made from blast furnace slag, heretofore a waste product. The utilization of this waste product has resulted in a great industry producing over ten per cent of the total production in this country.

So in these years of progress and expansion, the cement industry has seen the humble "sampler" develop into the present highly trained scientist whose word is law concerning the process of manufacture. The chemist alone is responsible for the quality of the product, and the fact that American-made Portland cement is recognized as superior to that made in other countries is a tribute to the untiring efforts and ability of our chemists.

FINAL STATISTICS.

The advance statement of final statistics of the Portland cement industry compiled by Mr. Burchard of the United States geological survey is out. It confirms the estimate made in February. Total production in 1915 was 85,914,907 barrels, 2,315,263 barrels less than the production of 1914, or 2.6 per cent reduction. Total sales indicated by shipments in the report amounted to 86,891,681 barrels, 977,774 barrels more than were produced in the year, and 453,726 barrels more than were sold in 1914. Total stocks on hand at the beginning of the present year were 11,781,166, or nearly a million barrels less than the stocks carried one year previous. The average mill price in 1915 for the year was $0.86 per barrel, while that of 1914 was $0.927.

Adverse weather conditions in open quarry operations sent the cost of production up in 1915 in a measure never encountered before. The same condition has prevailed throughout the first five months of 1916, and added to this is a very unsettled and short supply of common labor at the mills. Several mills are in fact unable to operate at all for the latter reason. All of them are definitely affected by the conditions. Repair parts and supplies in line with all products of iron and steel have about doubled in price within the past year. All of these elements of increased cost of production are forcing the mill price upward, while the mills actually out of commission and those forced to run short handed are further decreasing the production of 1916. Yet Portland cement, the greatest of the building staples, is maintained steadily in the markets at very reasonable advances in comparison with all other lines of manufacture.

NEWS OF CEMENT PLANTS.

General Manager Jones, of the Canada Cement Co., is reported this week as stating that the company's ordinary business is very satisfactory, considering the conditions, and that all is well with the munitions work on which the company is at work.

There is a rumor that the Crown Portland Cement plant at Wiarton, Ont., may be sold and, that instead of cement, magnesia, hydrate of lime, potash and other products will be manufactured.

The Pacific Portland Cement Co., San Francisco, has begun work on the extension of its tunnel at Cool, El Dorado county, an additional 600 feet, giving a total length of 1,200 feet. The tunnel runs under the lime rock, the rock being loaded onto cars from above.

The recent incorporation of the Old Mission Cement Co. of Nevada, is now being followed by the transfer to the new company of the property of the Old Mission Cement Co. of San Juan, Cal.

The real estate property and business of the Iowa Portland Cement Co. has been conveyed to the Hawkeye Portland Cement Co., at Des Moines, Ia. The purchase price is said to be $590,000.

NEW CEMENT COMPANY IN PERU.

A company has recently been organized in Lima for the manufacture of cement, according to the Callao Revista Commercial of February, 1916. The price of cement in Peru has risen from $3.40 to $6.50 a barrel since the outbreak of the war on account of reduced shipping facilities and the closing of European markets from which Peru formerly took 50 per cent of its average annual cement imports of 94,380 barrels.

PORTLAND CEMENT.

While it may be altogether permissible to spell Portland with a little P as someone has suggested, it is just as well to recall that the word stands for no idle meaning. All of the struggle for recognition first and established reputation afterwards was stressed upon and around that word as a definition. It has been made to express to the user of cement all the uniformity and hence reliability of the precise specification that was one tremendous undertaking to bring to practical perfection. While by comparison at present Portland cement is just about one hundred times stronger than all other cements combined in American markets when taken barrel for barrel of the production, still there are other types and kinds of cement properly known as such, and several hydraulic limes called cement that will probably always be known as cement. It is not enough to say or write simply cement when Portland cement is indicated, and it is always better to name a brand. Those things that become so very familiar to every man intimately connected with an industry do not become so familiar to the user or even the dealer customer, both of whom are often far away from the source of supply and not at all familiar to any of the manufacturing processes or other essentials. It has cost a big pile of money, toil and patience to teach that word Portland as well as it is known today, and it is worth all it cost to keep it taught.

There will always be some natural cement, and always some puzzolan cement.

Some people no doubt consider that there is no good reason for their existence, and think that they will soon disappear altogether. No matter what the opinions of these people may be, such is not the case.

At the present time some very commendable work is being done in a preliminary way upon a magnesian cement, both by the route of the well known Sorel reaction and by another method said to be entirely different from that, which will be used mainly for purposes that cannot be covered by Portland cement. Roman cements with old and new variations are sure to be developed when men of better education get to be cement users more numerously. The new concrete courses being introduced in various institutions of learning will not long be content with the crude and rudimentary condition of the art features of modern cement work. Once the wealth of art opportunity contained in working with plastic masses becomes the actual study of trained thinkers, refinements will come one after another that call for presently unknown formulae of mixtures of known materials, and new cements made upon widely different specifications to any we are now using.

We all know that Portland cement, the specific and well defined material that has accomplished so much has a very wide application, that for a very long list of uses it is the best obtainable material, that in all probability new uses are yet to be found for it, and that it is marvelously cheap in comparison to its intrinsic value. But like everything earthly and human it has its limitations, and other specifications will have to be used for those things to which it is not best adapted or suitable.

Portland cement is far too important to drop any of the syllables from its name.

DAYTON SUPPLY DEALERS ORGANIZE.

Leading material handlers of Dayton, Ohio, have organized the Building Material Dealers' Club of Dayton, with a charter membership of six concerns, including T. D. Eichelberger's Sons, W. S. Hawthorne, the Star Coal & Cement Co., the Dayton Builders' Supply Co. and the McGeevy & Ortman Co. The objects of the club are to secure mutual benefit for its members through the interchange of ideas, credit information, and the like. Irving Holderman is secretary.

LIME

Hydrated Lime Exclusively.

In the now distant past we first became interested, introduced, persistently recommended and stood sponsor for hydrated lime because it proved to be the only foolproof form in which the indispensable material could be handled, after a very careful diagnosis of the ailments of the industry as found in practice. Nearly all of the perfectly good lime that was delivered alongside of the jobs in the building trades was systematically divested of its plastic, caustic and normal recarbonating values at the mortar box, or by the man with the hoe.

Every user of lime was educated to believe that the fresher the lime the better it was, and not without good reasons at that. Indeed "this morning's draw" or "last night's draw" was the way a good deal of the lime was ordered and delivered. Sometimes it came to the job in carts the bodies of which were made of sheet iron hot and sizzling—30 to 40 minutes from the kiln.

This was considered the very best of service, the acme of lime organization. Few, if any, of the jobbers or dealers could handle lime so promptly, and for that reason the delivery of lime was up to the local lime producer. He operated usually one or two kilns as long as there were orders enough to warrant the firing and when orders were short the fires were blown out. Whatever amount of lime remained upon the drawing floor was packed in barrels and placed in the warehouse to take care of intermittent orders. Then a good sized pile of rock was quarried and piled up handy for charging into the kiln, and the lime man relapsed into a state of quiescence until something that listened like an order came into his horizon. There were some prominent exceptions, but such is a good picture of the lime industry in general terms until the close of the nineteenth century. A very large portion, much more than one would suspect, of the actual tonnage of lime used is still produced and sold in this identical way, with immaterial variations in each particular case of course due to local influences.

The element of time in the slacking of freshly drawn lime cannot be dispensed with successfully. The period of time absolutely essential to develop perfect putty varies according to any one of a dozen changeable factors always present and surrounding the operation. The lime might be overburned, underburned, or a little of both of these varieties might be mixed in the same batch. The day might be hot, cold, wet or dry. The workman might be experienced or as green as grass or Ireland; he might be lazy, tired or in love, rather than interested in or attentive to what he was doing. These are only some of the variable factors. My time and your patience forbids the mere enumeration of them, but don't forget that the workman, his attitude, ailments and distempers outranked and eclipsed all the others.

The one only thing that our modern workman lacks is time. He sells just as little of his time to his employer as he possibly can in order to provide for pinochle, pool and beer swilling. Since the latter described brands of the workman's activity is costly, he needs more money and gets it in order to improve the living conditions of the brewer and the saloonkeeper. But the additional money involved in this modern industrial delusion of the workman and his employer has to be charged as part of the cost of that workman's time, so that nobody concerned—workman, employer, or builder—can afford to pay the price of the time for good lime to slack, much less to dally with such a range of uncertainties as may extend all the way from five hours to forty hours. In fact, nobody pretended to do any such thing. If the lime proved to be unreasonable, that was too bad. It was just given another contemptuous dig with the hoe, a gob of tobacco stain was shot at the resultant bright spot, and the partial putty or "burnt" grog drawn through the screen and sanded for the job. Of course it made mud, but the mortar and plaster value of such mud was very low indeed, never anything like 50 per cent of the lime value was developed in this way. Yet a most surprising amount of this very kind of mud is employed in all the building markets right now. It is safe to say that fully half the brick buildings now standing have no better mortar than that just described. But this kind of practice in connection with the use of lime proved impossible in the plastering processes for self evident reasons, and so it was abandoned. There was no time nor inclination to stand for the time cost of slacking lime properly, so it thereby became an inferior material and was relegated to the rear as incompatible to modern progress.

The introduction of hydrate almost instantly changed this dismal picture. The process is one of delicate balances, extremely difficult at first to achieve, because no two samples from the same kiln seemed to take on the chemical change in the presence of minutely divided water or its elemental gases (whichever is correct) in precisely the same way. Nearly always a near-hydrate could be made from almost any fresh lump lime, but the real thing was more elusive and often unobtainable. Some very intelligent specialists have never been able to discern the difference between the hydrate and the near-hydrate. As a matter of fact in practice the near-hydrate is very, very useful, for the lime values are not destroyed and it makes both good mortars and good plasters with particular treatment in the working. These may differ in reference to different near-hydrates. Perfect hydration was found to depend very largely upon the proper and uniform burning of the lime if a commercial product was to be made continuously.

It has been a long road with some heavy going without any satisfactory definition of the true hydrate yet deveolped. We do not intend to allow any definition of hydrated lime to go unchallenged that does not cover the true description so that we are able to recognize it as we know it. All the current definitions so far are meaningless and might be stated by a novice.

Some day, some how we will have the correct definition of the true hydrate, and then there will be a separation of hydrates from near-hydrates, and more intelligible reports will come from the dealers and users, and there will be no note of dissatisfaction from the field now misled to some extent by conflicting advice. This definition looks most simple to those who know the least about it, but the one thing most needed now is actual knowledge and not misleading assumptions that it is all the same thing, and what applies to one applies to all who are hydrating their product.

As the recognized sponsor of hydrated lime we get some pretty hard raps time and again. We accept all this in a paternal way and usually find that the wrong "dope" for practice is at the bottom of the difficulty. Too many producers take things for granted, too few know the actual values and best applications and methods for their material.

Hydrated lime not only fulfilled all of the early predictions with regard to economizing and simplifying the uses of lime, so bringing it back to its own empiry in the masonry and plastering fields, but it went a whole lot further. Dealers in builders' supplies promptly recognized the fact that hydrated lime in 40 lb. paper sacks was a convenient and profitable form in which to handle the commodity. It is also seen to be a safe investment because it can be stored indefinitely. The losses and disappointments incident to handling lime in bulk and the excessive cost of barreled lime was the constant comparison that won hydrate its place with the trade.

Our unqualified and persistent indorsement of hydrated lime had the effect of opening the minds of the first substantial buyers who have since handled the bulk of the tonnage. For several years the number of dealers doubled and multiplied throughout the country, and it took no little boosting to encourage the dealers in the smaller communities to buy a whole car load of hydrated lime instead of the ten barrel orders to which they had been accustomed. This very big campaign is as yet only begun, for there are actually thousands of dealers who have yet never tasted the advantages of handling lime profitably by selling hydrate exclusively.

All of the indorsement that we have given hydrated lime during the fourteen or fifteen years of its existence as a commercial product was well founded then, has been well sustained by the merits of the material, and is still our steadfast position upon every and all occasions. All of the dealers and users of hydrated lime that we have been instrumental in starting with it, and the number is exceedingly great, consider it to be good business, and we do not know any case of complaint that cannot be fully explained and corrected. Hydrated lime has made good, and it is easy to understand and introduce from the standpoint of the dealer to his customers. With hydrate any ordinarily intelligent workman can do all that can be done with lime in its older forms, both cheaper and better and with less labor at the job—it simply cannot be destroyed by ignorance or neglect.

Returning again to the technicalities of hydrated lime, there are several chapters yet incomplete that promise wider fields of usefulness in new lines of application for this most wonderful product. But of these things there will be future articles in these columns as development goes on.

STANDARD BARREL BILL PASSES SENATE.

The bill in Congress to standardize lime barrels passed the Senate on May 31 and is now in the House awaiting consideration by that body. The bill, as it passed the Senate, consists of all the provisions as contained in the resolution passed by the National Lime Manufacturers' Association at its meeting in Cleveland, Ohio, last February.

Several slight changes in the bill were made by the Senate committee on standards, weights and measures, all of which being of particular importance and benefit to the lime industry. Instead of prescribing that the word "Large Barrel Two Hundred and Eighty Pounds," or "Small Barrel One Hundred and Eighty Pounds," shall be stenciled or otherwise clearly and permanently marked on one or both heads of the barrel, the committee

provides that it will only be required that the figures "280 lbs.," or "180 lbs." shall be marked on either of the heads of the barrel, thereby eliminating unnecessary verbiage. The Senate bill also provides that it shall be equally unlawful for a barrel to contain more lime than the net weight amount prescribed in the bill, as well as only a less-than-lawful weight, as provided by the original bill. Under the Senate bill lime imported from a foreign country must bear the name of the country from which it is imported, which provision is regarded as a distinct value to competitive conditions throughout the border territories.

The penal provisions of the bill are not made effective until Jan. 1, 1917, but the act becomes effective otherwise from and after the date of its passage. The object of this provision is to give manufacturers opportunity to use up stave and head material on hand, and to otherwise prepare for a full enforcement of the Act on and after January next. The standard barrel package, however is provided for immediately upon the passage of the bill and all its other provisions are to be complied with by the manufacturers subject, however, to no penalty until Jan. 1, 1917.

A hearing on the House bill to standardize the lime barrel was held before the Committee on coinage, weights, and measures, June 1 in the presence of a large gathering of representative lime producers. The hearing developed the important point that lime in barrels could only be properly sold by weight, and that the measure barrel as provided in the Federal act for dry commodities, was wholly impractical for use in the lime industry, and it is very probable that the committee will report out the Senate bill, which embodies the substance of the resolution on the standard barrel as passed by the National Lime Manufacturers' Association. It is quite possible, however, that the House convention will reduce the penalty from $500 to $100 and abolish the imprisonment feature of the bill. The committee, it is expected, will confine the penalty clause to interstate shipments only, as it believes that state's rights should be respected in the matter of enforcing penalties for the violation of Federal standards, weights and measures acts, which occur in the case of intrastate shipments.

THE EASTERN LIME MARKET.

New York, June 3.—While demand for agricultural lime shows falling off in most districts, the average condition of kiln operation throughout the eastern section is about ninety per cent of capacity. Plants, generally, are well occupied with building lime orders and chemical demand is reported heavy. The spring agricultural output in this section has been the best in years, with plants, as a rule, in better shape than usual to make prompt shipments. It is frequently observed that manufacturers are improving conditions at their plants so as to give the farmer lime when he can use it and this is a big step forward in the sales service to the agricultural trade.

Reports from the Virginia district, which has had a very good general demand for the past four months show a slight decrease in building demand. Agricultural demand is practically over for the spring season, although a few plants report that it will take a couple more weeks to clean up all orders. Chemical demand is reported as very heavy by some plants. General demand in the West Virginia district will continue heavy well into the latter part of June, according to advices from representative plants. A recent report from one plant of this district showed inability to accept additional orders for shipment prior to June 15. Maryland plants are still operating at or near capacity, but agricultural demand of this district will be pretty well supplied within another week. Kiln operations at the present are running from eighty-five per cent to capacity.

Pennsylvania district plants have had one of the best spring seasons ever experienced and the demand for both building and chemical lime continues to be very good. Hydrate shipments consist of the big output in this section and plants at the present are reported as being taxed to the limit in filling building orders for this material. Agricultural demand is about over. Chemical lime output is reported very good at most plants, and average kiln operation is running about ninety-five per cent of capacity. Labor scarcity has troubled New England producers considerably in meeting the heavy general demand that has existed for the past several months. It has been necessary to discontinue the operation of the kilns of some plants because of the impossibility of getting quarrymen. The agricultural lime demand of this section has been very good this spring and output would have been greater had it not been for the labor troubles so generally prevailing throughout this section.

The Modern Way.

Grading, tunneling and all other kinds of heavy excavating has got to be the job of the motor truck in these days of the development of operating economics. At the big Wilson avenue tunnel in Chicago which is being driven through solid limestone for a major part of the distance, the rock taken out by the excavators is loaded upon auto trucks which carry it for about a mile to the fully equipped modern crushing plant of the Peoples Crushed Stone Co. There is no quarry anywhere near the crusher, it is built in a good location for deliveries on the north branch of the Chicago Drainage Canal, upon a clay bank fully 80 feet above the underlying rock, and possibly more than 100 feet above rock, which is about the average overload of clay throughout the city. The owners really never gave the thought of a quarry one moment's consideration. The supply of rock is derived entirely from the great tunnel excavation by the use of a fleet of six five-ton auto trucks, and they have done the job efficiently and still running.

One of the greatest engineering projects that has ever been attempted on the Pacific Coast is the building of the Twin Peaks tunnel at San Francisco, California. The tunnel begins at the end of Market street and runs directly through the Twin Peaks, a distance of two and one half miles. When completed it will open up for settlement some of the city's most beautiful territory and will be the main artery of travel between the city and the comparatively level land to the south.

Before the advent of motor trucks the cost would have been prohibitive but the contractors who tackled this gigantic task knew the possibilities of the trucks and purchased them in large fleets before starting the work. The big bore has an arched roof extending fifteen feet above a thirty foot floor and when completed will give the city many new benefits.

The 5-ton White truck, shown in the illustration is a member of the large fleets of these power vehicles operated by the various contractors who are handling different sections of the tunnel. These trucks have played an important part in the work. Their ability to turn within the narrow confines of the tunnel, the rapidity with which they receive and dump their loads, and the short space of time it requires for them to deliver their five-tons load of rock and earth have saved large sums of money for the contractors and greatly speeded up the completion of the improvement.

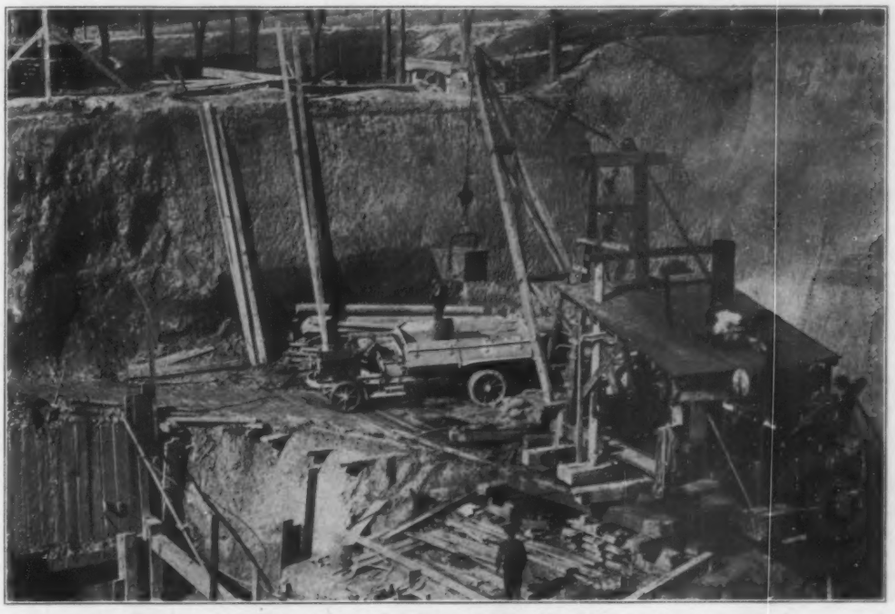
PITTSBURGH STONE MEN ACTIVE.

The stone men of the Pittsburgh district are beginning to get busy as the letting of state and county road contracts go forward. Prices are quite a little higher than last year. Road stone and bridge stone are selling fairly well and the tendencies are toward a larger market in these lines in midsummer. The great difficulty the past two months has been to get cars for prompt shipments.

J. M. McGuire & Co., who recently moved their offices from the Union Bank building to the Westinghouse building in this city was fortunate in securing the contract last week for a large proportion of the crushed stone wanted for the roads of Allegheny county this summer.

The Jamestown Cut Stone Co. is arranging to operate a stone plant on the south side at Jamestown, Pa., to supply local contractors with cut stone for building purposes.

A committee of expert engineers representing the Wisconsin Highway Commission met a committee of the Wisconsin Crushed Stone Association in Milwaukee early this month for a tour of inspection of highways in Milwaukee and other lake shore counties. The inspection was made to get information on the hardness of crushed stone that meets the needs of highways constructed in Wisconsin. The commission party included Dean F. Turneaure, Prof. W. O. Hotchkiss, Prof. A. R. Hirst, Prof. M. O. Withey and J. G. Mack.



NOTE THE WHITE MOTOR TRUCK WORKING IN TUNNEL EXCAVATION.

With the QUARRIES

The Declaration of Independence.

Reference to the local sales memorandums of a very large number of rock crushing plants will demonstrate that the sales made to people who need crushed rock bad enough to come after it constitutes the most profitable feature of the sales, although it is insignificantly small.

By long odds the biggest thing in the crushing business is the output and the smallest is the income in money. Crushed rock is the cheapest commodity ever known in the mechanical arts. It is the only thief proof material known, because it costs more to steal it than it is worth. If a man were to come with a basket or bag to carry it off, he would stagger under a nickel's worth before he could cross the road, even if that was only 12' wide. The commercial success of rock crushing depends entirely upon economical efficiency in handling the great tonnages produced by the plants of modern equipment, and the means of transportation from the quarry to work in which it is used. For this reason all crushing plants are located strategically with reference to transportation facilities, either by water or railroad. Water transportation is always the cheapest, the most reliable, the best and most profitable whenever it is correctly worked out. But water transportation is not always available and the railroad has been the sole reliance of all the other crushing plants not so fortunately independent. Railroad efficiency has for many years habitually been over-estimated and exaggerated, but the limitations are becoming more distinct day by day and before very long all of the industries will have their correct measure just as several of them already have taken it. Crushed rock is too cheap to be very attractive to the railroads. If it did not happen to be a commodity very essential to railroad maintenance the roads would hold it in distinct disfavor, and would not provide equipment suitable to transport it, but with other equipment hold the rates higher.

Be that as it may, we have before us actual conditions of fact with regard to transportation that govern and limit operation to a great extent, and absolutely control deliveries. The selling department is compelled to straddle a big gap all the time that can be described particularly as lying between the plant where the crusher man loses control of the goods and the job where he collects his money. This gap is the main pitfall and principal burden that amounts to a blockade of constant pressure against the crusher operator. Only veritable giants of indomitable will and resolution can overcome such odds.

It is in this gap that the common carrier, the unloading operations and the teamster are making money out of the product. Not actually out of the product because such costs are often more than double the value of the product itself. None of them are taking any risk, for the crusher operator is compelled to guarantee all of these charges by including them in the price quoted by his salesmen for the delivered product. There are a few cases, perhaps, in which crushed rock is quoted f. o. b. the crusher, but these are very few and far between. The contractor or other user of the material wants to know the price delivered where he needs it, and the great perponderance of the tonnage is sold upon such a basis.

The teamster and the railroad practically get their money on the spot. Oftentimes the crusher operator has to put out his money to pay both of these and include the amounts in his bill without interest or any return whatever for the use of his capital. As soon as the bill of lading is signed the guarantee goes into effect. If the car arrives at railroad destination upon a day that is followed by a week of rain, so that unloading and hauling is a matter of physical impossibility or double cost, the crusher operator and not the contractor or other customer is stuck for the demurrage. The guarantee of the accumulated cost within this fatal gap is unerring and complete. It costs a whole lot of money, but we have never seen or heard of any crusher operator providing for such a cost in the overhead that he figures into the price of the commodity that he sells. It is there all the same, every day and with every shipment. When you get down with your sharp pointed pencil to figure it out you will be surprised at the cost that the gap amounts to in your business which is a part of practically every commercial transaction.

The cost of the items located inside of this gap is less when deliveries are made to an industrial plant having equipment for receiving and unloading the material, and it entirely disappears when the sale is made f. o. b. plant. The elimination of the gap is the principal reason why local sales made right at the crusher, and paid for by the customer upon that basis look so good upon the records, and is hence so desirable a feature of the business to build up and increase wherever that can be done.

Deliveries of crushed rock shipped into large competitive markets which are most attractive to the crusher man because very great tonnages can be disposed is not really good business. Let us figure it out, taking the Chicago market as an example, for that is parallel in many ways to all of the other larger markets, particularly those served by crusher plants having railroad locations. The price of rock in concrete sizes and the sizes used in street bases is currently quoted just now at $1.10 per ton at the job, having no more than one mile haul. All of the crushing plants, with two or three exceptions, are located outside of the city limits, eight, fifteen, twenty and thirty miles, in all such cases involving a railroad haul.

Since the gap is the principal feature of the cost we will take it from the job back to the crusher. One of the teaming corporations delivers the crushed rock at the job. His fixed price for a one-mile haul or less is 50 cents per ton. The railroad rate for all quarries in the district to the city is 20 cents a ton, marked capacity of the car, which is usually fifty tons or 100,000 pounds. Switching of the $1.10, leaving 22½ cents a ton for the net somewhat, brings the total railroad collection to an average of 37½ cents a ton, where unloading equipment is provided. This takes 87½ cents a ton out of the $1.10, leaving 22½ cents a ton for the net selling price of the material at the crusher. Observe that the gap cost of 87½ cents is guaranteed by the crusher man in order to move his stuff, for which he gets 22½ cents. His responsibility is constant and positive. That of the factors operating in the gap is only transient and incidental for a very brief period so that a very small tail is the handle that is used to wag an exceptionally heavy dog. You may be sure that it is costing big money to perform that feat, although in this calculation whatever such cost and its guarantees might be is included in the 22½ cents.

Since the crusher man has to guarantee all of the charge in the gap amounting to 87½ cents it ought to be pretty clear that there is more profit connected with the transportation and delivery than there is in simply producing the material at the plant. Those plants located within the city, whose output is comparatively small, and is limited by many city ordinances and other hampering features, do not have the items that make up the gap to contend with. The 50 cents per net ton per mile haul is the only item of cost after they lose control of the product, leaving them 60 cents net per ton, which has some elbow room in it despite the advances in cost of operating under city restrictions.

We have often stressed the importance and profit in developing local deliveries. None of us know the possibilities for marketing the product of the crusher, provided ample and adequate facilities for the transportation and delivery could be provided. There are hundreds of customers and in some cases thousands, located within a radius of six or seven miles of many crusher plants. It is surprising how many of these possibilities would be actual purchasers if they could be made to know that a small order of a few tons could be delivered without any further effort on their part than that of giving the order and paying the bill either before or after the goods arrive. As it has always stood in the past, if any of these possible customers needed a few tons of crushed rock he would have to make arrangements with some one to do the hauling or do it himself, thus making two transactions out of one and placing a barrier of very considerable and often variable expense between the crusher man and his customer.

The Declaration of Independence for the rock crushing industry, and the most certain path to present and permanent profit consists of working out the application of a fleet of motor trucks with trailers, unloaders, and other incidental equipment. With this one can make an additional profit out of the transportation features that belongs to the business, as well as out of the material from the quarries and the processes of crushing and screening at the plant.

With the well known and perfectly reliable figures upon the cost of delivery based on the ton mile cost it will be demonstrated to any man who gives the matter thoughtful consideration, that with modern truck equipment he can charge 50 per cent, and in some cases 100 per cent profit for the transportation feature of direct deliveries, get the full plant price for the material under the bins and still deliver it to the customer at a very attractive price from his standpoint.

In the matter of road work record figures will bear out the deduction that such equipment will lower the price of road materials so much as to attract double the volume of business from public officials, who are now paying from three to five times too much for hauling.

There are many examples of this kind of efficiency that are working in practice right under our noses. One can be cited in which a contractor having 25,000 yards of material to haul to a road over a stretch of six miles, received bids for hauling at an average for the whole job of $2.00 per ton. The bid was not accepted, but four ten-ton trucks were put on the job and all of the hauling done at an average price of 55 cents per ton. This 20 per cent deterioration was charged off the price of the equipment, which in all respects was as good as new, for the repairs and supplies of every kind were kept up to the top notch.

Scientist Suggests Quarry Opportunity in Texas

James P. Nash, testing engineer of the roads material laboratory of the University of Texas, in a recent interview spoke of the very excellent lime rock, suitable for road material, that is undeveloped in the state.

Texas has entered upon a program of spending $14,000,000 per year in new road construction, and nearly as much more is being spent by counties and municipalities in street and road work.

"There is plenty of splendid limestone and dolomite in Texas as yet offering opportunity for profitable commercial development. I refer particularly to the stone of Burnet county.

"The deposits I have in mind near the town of Burnet have never been developed, although they are situated upon a railroad and are not far from ready markets. Most of the hard limestones and dolomites of Burnet county are located along the H. & T. C. railroad, permitting a one-line haul to a large territory east, including Austin, Giddings, Brenham and Houston. From Hempstead this railroad serves a large territory singularly lacking in good road-building materials of any kind, while concrete materials are such that a good crushed stone would be welcomed by most users at a considerable advance in price over what they are paying for aggregate materials now in use.

"From Burnet north, the one-line haul ends shortly at Lampasas, but there intercepts the Santa Fe, which covers an immense territory west, north and east. To the northeast, shipments can be made by a two-line haul to Palestine, using the H. & T. C. to McNeil and at that point transferring to the I. & G. N. With a three-line haul, the entire available territory in Texas where crushed stone can be marketed may be reached."

Mr. Nash points out that there have been about 150 different Texas limestones from all sections of the state tested under his supervision in the roads material laboratory of the university.

"The results of these tests show conclusively that the limestones and dolomites of Burnet county are far in the lead. Except for some trap rock and one sandstone, they are the only stone tested that we could recommend for heavy traffic in bituminous construction, because of their comparatively high resistence to wear, hardness and toughness. The average compression strength of these limestones as shown by tests made on two-inch cubes is 19,000 pounds per square inch, while eight of the best dolomites averaged 21,000 per square inch. The general average of Texas limestones is about 12,000 pounds per square inch. Thus it will be seen that the compression strength of the Burnet limestone and dolomite is about seventy-five per cent higher than that of the average. The toughness of the ordinary limestone now in use is less than five, while the Burnet county stones give an average of nine, reaching as high as sixteen in individual tests. The toughness tests were made on the Page impact machine for toughness, which is considered a standard machine. The resistance to wear and hardness of these stones will run from twenty-five to fifty per cent higher than the average limestone now in use."

Illustrating the fact that it is economy to use a superior stone at an advanced price, if necessary, Mr. Nash proposes the following example:

"Suppose a user had to pay $.50 per ton more for a superior stone. Stone running 2,500 pounds to the yard at $.50 per ton more would advance the cost of a yard of it $.625. Now it requires a layer of stone 3½ inches thick to compact into a 2½-inch layer of bituminous surfacing, so that a yard of stone would cover slightly over ten square yards of surfacing, which brings the advance in cost for a yard of surfacing due to buying superior material to $.062 per square yard for a street surface that is assured of lasting twice as long."

Mr. Nash then points out that if the superior stone can be delivered at not more than $.25 per ton advance in price, most engineers would likely specify the better grade. Moreover, concrete road builders are always willing to pay a little more for a better grade and even in plain macadam construction, it has been found economical to get the best stone that can be had even at a slight advance in price.

In conclusion, Mr. Nash says that with the unmistakable indications of superiority possessed by the Burnet stone, as developed by the laboratory tests, the fairly satisfactory shipping facilities, and, furthermore, considering the ever-increasing market in Texas for crushed stone, there should be little trouble in developing a profitable stone industry around some of the many excellent Burnet county limestone and dolomite deposits, provided that the individuals engaging in the enterprise possess the requisite capital and have a thorough knowledge of handling this class of material.

FINE SCREENINGS TO PREVENT MINE EXPLOSIONS.

The Federal Bureau of Mines has made a large number of explosion experiments at the experimental mine at Experiment, Pa., to determine the efficiency of rock dust in preventing the initiation of mine explosions and in checking them after they have initiated. The proportion of shale dust, to coal dust required, to prevent or check explosions has been determined for coal dust from many seams.

The rock-dust method seemed to have such an advantage over watering methods in which water is applied infrequently, in that more constant protection is afforded, that arrangements were made with a coal company in the Pittsburgh district to rock-dust a part of one of their mines and keep accurate account of the costs. Bureau engineers inspected the rock-dusted zones from time to time and took samples to insure that the zones were in safe condition. This work was continued for a year, the entries being redusted from time to time as the occasion required. The test has been so satisfactory that the dusting has been extended to three other mines, and conferences have been held with officials of other companies for the purpose of explaining results with the view to adopting the method. Considerable interest has also been shown in other parts of the country, particularly in Colorado, where rock-dusting has been carried on in the Delagua mine of the Victor American Fuel Co. for more than four years. The probable wide adoption of this method of rendering coal dust inert, therefore, seems pretty well established.

The first rock dust that was used in the Pittsburgh district was pulverized limestone dust of such fineness that about 75 per cent would pass through a 100-mesh sieve. This material was very satisfactory, but a coarser material would be easier and cheaper to prepare, therefore, explosion tests were made in the experimental mine to determine the relative efficiency of fine and coarse material. It was found that material prepared by grinding in a hammer crusher, equipped with a 1-16-inch slotted screen, was only a little less efficient than the pulverized dust.

In rock-dusting a mine entry, the best way to apply the first coating is, under most conditions, to throw the dust on by hand, because a thicker and better distributed coat is obtained. In time, coal-dust settles on the rock-dust, and redusting is desirable. This is best done by a rock-dusting machine, which blows into the air current a cloud of rock-dust that settles in a mantle over the coal-dust.

The Twining-Large Co., Trenton, N. J.; capital, $10,000; to operate limestone quarries; incorporators, E. P. Griest, George W. Griest and C. P. Smith.

EXPLOSIVES IN QUARRYING.

By S. R. Russell.

(Paper read before Du Pont Sales Convention, February, 1916.)

There are four general methods of working a face of stone, viz.: benching, snake holing, well drilling, and gopher holing or tunneling.

Snake Hole Method.

By this is meant the drilling of horizontal holes in the bottom of a quarry face, springing and loading heavily so that the whole face is brought down in one blast. This method of working is adapted best in the hard, massive, irregular rocks and where the height of the face does not exceed 60 feet. It is employed almost exclusively in the trap rock quarries of New England and the hard massive limestones of eastern Pennsylvania. Where the face is in excess of 60 feet a combination of vertical benching and snake holing is used or two snake hole lifts.

Holes are drilled with tripod drills to a depth of 24 feet to 30 feet. It is customary to start the hole about two feet above the floor, allowing it to dip, so that it is on or just above the level of the floor at the point. They are spaced not more than 10 feet apart. Holes are sprung as a rule from four to six or more times, depending on material and height of face.

The first springing charge consists of two cartridges say of 1½x8" dynamite; second, six cartridges; third, 12 to 15 cartridges; fourth, 20 to 30 cartridges; fifth, 40 to 50 cartridges. A mark is placed on the tamping stick and after each spring chamber is filled up to mark on the stick. Sufficient time is allowed between springs for the holes to cool off. Holes are usually sprung so they can be loaded with from 100 pounds to 300 pounds each, depending on character of material and the over burden, and not to raise more than four or five feet in the shank of the hole.

This is a very economical and efficient method of quarrying where it is adapted, although it requires more care and judgment on the part of the blaster. Usually in hard traps or granites 60 per cent straight or gelatin is used, while in limestones a 40 per cent is found sufficiently strong. To facilitate loading the cartridges are loaded through a tin or brass pipe which can be pulled out gradually as the explosive rises in the chamber.

It is surprising what good results are obtained in some quarries with this method of drilling and blasting.

(To be continued.)

ECHOES FROM THE QUARRIES.

Collins & Webb of Los Angeles have sold additional rock crushing machinery to the Mission Rock & Gravel Co. of San Diego, Cal. The latter company has secured a contract for supplying crushed rock for the United States government fortifications at San Diego.

The Queen City Crushed Stone & Sand Co., which was recently incorporated with $50,000 capital, has purchased seventy-eight acres of land near Remington, Ohio, for $20,000 and will erect a plant there. James N. Sprague, 1416 First National Bank building, Cincinnati, Ohio, is making arrangements.

The Maisonneuve Quarry Co. has been incorporated with a capital of $45,000, with headquarters at Montreal, P. Q.

Empire Cement & Limestone Co., Atlanta, Ga., capital $10,000; incorporators, J. H. Davis, George W. Collier, J. R. Collier and others.

Byer-Kane Co., Passaic, N. J.; capital, $50,000; to deal in and manufacture crushed stone, etc.; incorporators, Edward T. Dyer, Clifton; Manus J. Kane, Woodhaven, N. Y., and M. J. Nicholson, Passaic, N. J.

Sand and Gravel

PITTSBURGH SAND MEN BUSY.

All sand companies in the Pittsburgh district are busy at present. Fine weather and the fair stage of water have helped to make their business profitable this summer, so far as not having any loss is concerned. Most of the companies have improved their plants or are buying more apparatus so as to give them a larger capacity for doing business this year. The demand for sand from the steel corporation plants and other big industrial concerns is excellent and this, with the railroad demand, partly offsets the lack of business in building lines. Country dealers are doing more in this latter respect than city retailers or contractors.

The Rodgers Sand Co., Pittsburgh, Pa., is having built for it by the American Bridge Co., at Ambridge, Pa., a very fine steel float which will be put in position shortly on the Allegheny river at the foot of Fifth street, whence its big city deliveries will be made by wagon. The Rodgers company reports prices up a little all along the line and a very fair season of work. It has some immense contracts for delivering sand to the steel companies at Clairton and Braddock, Pa., on the Monongahela river and its boats are all busy at present.

J. K. Davison & Brother are putting in a fine new plant at Kiskiminetas Junction on the Allegheny river. This firm reports that it is making a good steady gain over its 1915 totals, especially in its carload business. Its team and truck business in the city has shown a little decrease the past two weeks but this week it has secured a very large order which will keep it busy for some time. The company believes that there will be more building in midsummer than there is now, as many projects are being re-figured with the prospect of letting them.

The Ohio River Sand Co. is very busy at its plant at Ambridge, Pa., on the Ohio river and reports prospects good for a nice summer trade. It is especially pleased over the better prices which are being paid this year for sand uniformly throughout this district. These range at about forty cents per ton for gravel and fifty-five cents per ton for sand at the hoist in carload lots.

LOUISVILLE SAND MARKET QUIET.

Louisville, Ky., June 5.—Business with the Louisville concerns digging sand from the Ohio River has been comparatively quiet for the past few weeks, and in most cases the river flotillas are not more than half busy although the river stage is good. Stocks on hand are generally large, and operations will not be resumed on a full-time basis until the movement becomes such as will warrant greater activity. There are a number of good jobs in sight, but only a few small orders for immediate delivery.

SAND AND GRAVEL BREVITIES.

H. C. Harkness has sold out his interest in the Albany Sand & Gravel Co., of Albany, Ore.

Title has been taken by the DeFrain Sand Company, of Philadelphia, to two two and three-story mill structures situated on the Southeast side of Beach street, just South of Vienna street, that city. The purchase price was $75,000 subject to a mortgage of $200,000. The assessed valuation of the property is $150,000.

Whitney Bros., Superior, Wis., have a contract to furnish about 75,000 yards of sand for the new concrete ore dock which will be erected for the Soo Railway at Ashland this summer.

The Burlington Sand & Gravel Co., Burlington, Wis., has started shipping, having completed considerable improvements. The side track has been extended and a quarter of a mile additional track laid. A new seven-inch crusher has been installed and the bins, which were damaged by a heavy wind storm last fall, have been rebuilt.

The Wilcox Sand & Gravel Co., Fontana, Wis., is erecting a new plant which will have a capacity of thirty-five cars per day. A new and larger crusher will be installed, and four circular concrete bins, thirty-four by fourteen feet, are being constructed. The work is in charge of Capt. H. F. Loftus.

The Edgemore Sand & Gravel Co. has resumed operations at its plant at New Castle, Pa., and hopes to run at full capacity within the next two weeks.

The Pittsburgh Plate Glass Co. is bringing up a fleet of boats from Wheeling, W. Va., to dig sand in the Allegheny river at Logansport, Pa., during the coming summer. The boats will be much larger than those which have formerly been used in that territory.

Ralph A. Woods Sand Co. has been incorporated by R. A. and Mary E. Woods and Norman S. Powell, of Sharon, Pa. The company will continue working the well-known Woods sand bank at the end of South Irvine avenue in Sharon and will also engage in the manufacture of building stone and brick.

NEW SAND AND GRAVEL INCORPORATIONS.

The Eastside Rock & Gravel Co., Los Angeles, Cal.; capital $10,000; incorporators, Leo Westphal, J. A. Gautier and E. Piatka.

North Bros. Sand & Gravel Corporation, New York City, N. Y.; capital, $5,000; gravel, stone, etc.; incorporators, William H. D. North, Edward P. Butler and John A. Burns.

The Columbus Sand Co., Columbus, Neb.; capital, $10,000; incorporators, J. W. Hutchinson, T. B. King and T. Cone.

Cumberland Crushed Stone & Gravel Co., care of Benjamin B. Sanderson, 98 Exchange street, Portland, Me; capital $50,000.

LOS ANGELES BUILDERS ELECT OFFICERS.

The recently reorganized Builders' Exchange at Los Angeles, Cal., held its first election last week. J. H. Bean, general contractor, who was president before the reorganization, was elected to the same office; M. A. Berne, of the Woodstone Marble & Tile Co., was elected first vice president; Walter R. Simons, president of the Simons Brick Co., second vice president; and John Griffin, general manager of the Pacific Coast Planing Mill Co., treasurer. Walter Risk, secretary and manager of the Builders' Exchange, holds over until after the other new officers are installed, and it is understood that he will then be re-appointed.

A new board of directors was also elected as follows:

R. A. Warren of the Aaron-Warren Co., R. Wolfsberg, president of the Electric Agencies Co.; E. W. Crowell of Crowell & Sutton, Eric Lung, general contractor; L. B. Webster of the W. P. Fuller Co., W. E. Stradley of Stradley & Newton, George Pedgrift of Pedgrift Bros., Fred Bogenberger of the Panzer-Hamilton Co., William Henry, manager of the Pioneer Paper Co., G. E. Arbogast of the F. E. Newberry Co., and L. Bly, president of the Bly Bros. & McGilliard Stone Co.

The installation of the new officers and directors will be made the occasion of a big get-together meeting.

SCHAEFFER BULLETIN ON POIDOMETERS.

The Schaeffer Engineering & Equipment Co., of Tiffin, Ohio, has recently issued Bulletin No. 5, an attractive sixteen-page booklet describing the Schaeffer poidometer. The various features of the poidometer are described in clear and concise paragraphs and are excellently illustrated.

Clay Products

NEWS OF THE FIELD.

The Port Costa Brick Works of San Francisco and Port Costa, Cal., will supply a million and a half brick for the proposed additions to the San Francisco city and county hospital.

Fire brick shortage is one of the features of the clay products market in Boston just now. With all the industries running full blast the demand for this great necessity for boiler rooms, both in new construction and replacement, is far above normal. If the middle west plants get two or three carloads in here at a time, they are snapped up quickly and carload lots are just about impossible to get. C. M. Palmer, manager Eastern Clay Goods Co., reports satisfactory condition of trade in general, with sewer pipe moving steadily. There seem indications of quietness in building materials, but on the whole volume and character of business seasonable. This firm reports five months' business of this year of equal volume to that in 1915.

J. H. Bell, sales manager for the Louisville Fire Brick Co., Highland Park, Ky., reports that the company recently landed the big Government contract calling for about 150 or 200 cars of fire brick to be used in the Government navy yards and for lining fireboxes on battleships, etc. The company also has about all the steel and iron mill work that it can handle just now and is unable to guarantee better than August or September deliveries. The plant at Grahn, Ky., is being enlarged to a capacity of 12,000 brick a day and will be completed within thirty days. Two new kilns have already been built.

Brick concerns in general in Pittsburgh, Pa., and vicinity are busy and report some improvement in general conditions during the last month. Those builders who have never had to accept the high figures on bids are now going ahead with their work. The demand for building brick is on this account a little improved. Prices are higher. Paving brick men are much encouraged with the situation and say that this year bids fair to be a more profitable one for them than any for some time.

The Geneva Brick & Tile Works, Geneva, Ohio, will be a thing of the past soon. The machinery will be sold, the ovens will be razed and the land will be used for farming purposes. The plant was formerly one of the leading industries of this town.

The Harbison-Walker Refractories Co., with offices in the Farmers Bank building, Pittsburgh, has declared the usual quarterly dividend of one and one-half per cent on its common stock payable June 1 to stockholders of record May 22.

At Lock Haven, Pa., Aaron Keyler, proprietor of the New Commercial hotel is forming a company to build a fire brick plant at Benezette, Elk county, Pa. The company will probably be operating before fall.

F. R. Colvin, J. A. Spence and Louis Raynal have organized the Bessemer Brick Co., which will operate at Monongahela City, Pa.

The old Hollandale brick yard company at Hollandale, Wis., has been reorganized and will be incorporated as the Granite Brick Co. Operations will be resumed as early as possible. The men interested in the reorganization are W. A. Kelly, H. L. Phillips, W. W. Congdon, F. W. Hall, Ed Bright and Geo. W. Limbert.

The Colonial Brick Co., Warren, Pa.; incorporators, C. E. Foster, Archer Johnson and E. C. Swanson.

Mazura Clay Products Co., Uhrichsville, Ohio; capital, $100,000; James J. Mazurie, Ira E. Weel, Byron E. Ottman, William E. Elliott and Walter W. Reed.

Maryland Clay Products Co., Lonaconing, Md.; J. W. Galloway, 1 Broadway, New York City, president, Louis N. Rancke, 218 E. Lexington street, Baltimore, chief consulting engineer.

OBITUARY.

Bernard Suer, of B. Suer & Sons, brick manufacturers and material dealers, died at his home, Cincinnati, on May 28, of diabetes. He was sixty years of age, and was well known in the building and material trades on account of his long career in the brick business. Among the surviving family were five sons, of whom two were associated with Mr. Suer as members of the firm.

J. W. Ormsby, aged 74, died suddenly May 23 at his summer home near Briggsville, Wis. Mr. Ormsby was widely known as a manufacturer of lime and until a few years ago was active in the management of his numerous manufacturing enterprises. Funeral services were held at Milwaukee. Mr. Ormsby is survived by his daughter, Mrs. Harrison S. Greene, and one son, John Ormsby, Portland, Ore.

Franz Woerfel, aged 69, pioneer brick manufacturer of Manitowoc, Wis., died suddenly recently of heart failure. Death came while he was working about the Woerfel brick and tile yard. Mr. Woerfel was a native of Germany. He is survived by the widow and five children.

W. W. Childs, for many years president of the Remillard Brick Co. of San Francisco and Oakland, Cal., died at his home in Oakland last week.

John P. Labahn, former president of the Illinois Brick Co., Chicago, died on May 23, in this city. Mr. Labahn was born in Germany in 1843 and came to Chicago when he was eighteen years old. He was in the brick manufacturing business until four years ago, when he retired from active life.

Willoughby Focht, one of Allentown's oldest and distinguished citizens and who bore the distinction of having erected the first cement mill in that section of the country, died recently at the grand old age of 80 years, after having suffered throughout the winter months from the ailments of a complication of diseases. In 1865 he erected the first cement mill built in this section and which is now operated by the Coplay Cement Manufacturing Co. In 1886 he was employed to build a mill for the American Cement Co., at Egypt and later erected seven more mills in Egypt and one at Jordan, N. Y. Mr. Focht was extremely well known throughout the trade. He is survived by a widow and six children.

SAND MAN'S WHEREABOUTS SOUGHT.

The whereabouts of William Arthur Higby, who until recently has been employed by a sand and gravel firm of Detroit, has been unknown for some time and he is being sought by his son, Frank M. Higby, 513 Elmwood avenue, Detroit, Mich. The son cannot account for the father's mysterious absence from home and is anxious to communicate with anyone who knows of his whereabouts.

WILLIAM ARTHUR HIGBY, MISSING SAND MAN.

The missing man is fifty-eight years old and five feet ten inches tall; he weighs about 175 pounds, has dark hair and blue eyes. The index finger of his right hand curves noticeably toward the other fingers. He wears nose glasses only when reading or writing and uses tobacco only when smoking a pipe.

Any information which will give the son a chance to communicate with his father will be greatly appreciated if addressed to Frank M. Higby, 513 Elmwood avenue, Detroit, Mich.—Adv.

The market place of the building material industry. Employment department, machinery wanted and for sale, etc. If your wants are not answered in this page, write a letter to this office.

THE FRANCIS PUBLISHING CO.
537 S. Dearborn Street Chicago, Illinois

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EMPLOYMENT WANTED

WANTED—Position as quarry superintendent, 45 years old, 15 years' experience. Furnish references to ability, can handle all classes of labor, can move men. Address GEORGE HORTON, Union Bridge, Md., Box 326.

WANTED—Position as Superintendent or Manager lime and stone properties. Fifteen years' experience designing, building, operating, lime, hydrate lime, stone-crushing plants, opening, operating stone quarries. Address BOX 1123, care ROCK PRODUCTS AND BUILDING MATERIALS.

PLANTS FOR SALE

We have for sale 3 stone crushing plants in Illinois, well located for business and big money-makers under proper management. Good reasons for making sale by owners. Two are No. 8 complete plants and one No. 6. Investigation solicited. Address Box 1128, care ROCK PRODUCTS AND BUILDING MATERIALS.

FOR SALE.

Stone Quarry Plant near Columbia, South Carolina. Good climate the year around. Plant fully equipped and now operating. Good opportunity for someone. Present owners unable to give proposition the necessary attention. Address Box 1126, care ROCK PRODUCTS AND BUILDING MATERIALS.

LIME PLANT FOR SALE

With all necessary buildings, two crushers, lime grinding machine (6) kilns capacity of 1,800 bushels per day. Plant in full operation, centrally located, fully equipped. Splendid crushed stone business. Two railroads by the plant, making shipping facilities the best. The property contains 37 acres of land underlaid with an inexhaustible supply of lime and building stone. A splendid opportunity to make big returns on the investment. Reason for selling, advanced age and ill health. Address Box 425, Frederick, Md.

MACHINERY WANTED

WANTED—A No. 6 Austin or Gates Gyratory Crusher in good condition. The Henderson Farmers' Lime Co., Woodstock, Ont.

Hydrating Machinery Wanted; Crusher, pulverizer and screens for hydrating mill. Must be in perfect condition and a bargain. Cheney Lime Company, Allgood, Alabama.

WANTED—Second hand No. 7½ or No. 9 Stone Crusher. Big Screens, Elevator and Conveyor. Name price. G. F. POTTER, 6122 Navarre Pl., Madisonville, Ohio.

WANTED—A rotary sand-lime brick press twelve mold Saginaw press preferred. State condition, price and location. Address Box 1129, care ROCK PRODUCTS AND BUILDING MATERIALS.

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